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ORIGINAL LECTURES.

DIPHTHERIA AND ITS TREATMENT, BASED ON RECENT INVESTIGATIONS.

*A clinical lecture delivered at the Philadelphia Hospital,
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(Reported by WILLIAM H. MORRISON, M.D.)

At the last lecture, as you may remember, I spoke of some of the acute varieties of diseases of the throat in children. I propose to-day to make some remarks in reference to the clinical aspect of the subject of diphtheria, based upon the experiments upon animals and observations in the practice of some of us who are interested in this subject at the present time. At my last lecture, I pointed out to you the differential diagnosis of the various forms of acute laryngeal disease in children; these were spasmodic laryngitis, or false croup, one of the most important and most frequent of these diseases; a combination, as it were, of simple acute laryngitis, and laryngismus stridulus, and pseudo-membranous laryngitis, or true croup. I showed you at that time how pseudo-membranous laryngitis differed in its symptoms from spasmodic laryngitis, especially in this fact, that in the former there was present a false membrane, which, by causing mechanical obstruction and interfering with respiration, gives rise to other symptoms not found in the latter disease. At the present time the most important subject which can come before us is the difference, if there be any, between pseudo-membranous laryngitis and the disease known as diphtheria, which is also characterized by a membranous deposit upon the mucous membrane of the throat, fauces, and nares, sometimes extending into the larynx and trachea, giving rise to various symptoms, many of which are due to the presence of membrane obstructing the tracheal opening. I believe that the former affection is always associated with the laryngeal and tracheal forms of the latter, usually presenting its most marked symptom, but that it can occur by itself as the result of cold or irritation as well as its analogue croupous pneumonia. I told you that the mucous membrane of the pharynx differs anatomically from that of the larynx and trachea, and that, therefore, irritation and inflammation of these two parts give rise to entirely different sets of symptoms. The mucous membrane of the pharynx is covered by a thick, almost impenetrable layer of squamous epithelium. This is placed on a loosely attached submucous tissue which is capable of being greatly distended by infiltration and by blood, so that inflammation of this membrane will cause congestion and oedema to take place below the epithelium, and may give rise, at the same time, to the appearance of but slight congestion of its surface when the disturbance beneath is very great. The mucous membrane of the larynx and trachea is covered by the ciliated form of columnar epithelium. This epithelium is placed upon a very dense basement membrane, and has behind it thick inelastic cartilage. Inflammation at this point will be rapidly followed by the appearance of fibroplastic lymph upon the surface, lifting the easily de-

tached epithelium, and giving rise to layers of membrane; these deposits may form rapidly, and quickly occlude the larynx or trachea.

About the year 1868, Oertel found in the blood of persons suffering from diphtheria, a form of micrococcus, a peculiar granular matter. A full account of this subject will be found in Ziemssen's *Encyclopedia*, and in the supplement of the report of the National Board of Health for last year, but as this latter is not accessible to many of you, I go into this subject somewhat in detail. Many observers subsequently found that this peculiar matter, which occasionally took the form of little black granules, and again appeared in masses, was present in all cases of diphtheria, and in proportion to the severity of the attack. The presence of these micrococci has been positively substantiated, not only in diphtheria, but also in almost all of the so-called zymotic affections.

Those of you who attended the lectures in this hospital last spring, will remember the severe epidemic of measles in the children's ward at that time. The children died very rapidly, and it was impossible at first to account for their rapid death. Dr. Formad and myself made a number of observations on the blood of these cases, and it was found that as soon as the malignant symptoms presented themselves, the blood of these children was filled with micrococci. There were immense numbers of these; not only did they float in the liquid in masses, looking like frog-spawn on a pond, but they also penetrated the white corpuscles, and increased in numbers to such an extent as to cause the globule to burst in many cases, although the red corpuscles were not attacked. The severity of the symptoms was found to be in proportion to the number of the micrococci. Whether this was due to the micrococci, or whether the severity of the symptoms and the presence of the micrococci were simply coincident, I am not prepared to positively assert; we do know, however, that where this material was found in the blood, those children were in danger of death from the malignancy of the disease and from exhaustion, and also from heart clot. It has been found by many observers that these micrococci exist not only in the part where they are introduced, as in the blood of the throat in diphtheria, but they are also carried to the finest capillaries in the body, multiplying with great rapidity. They have been found in the marrow of the bones, and in the minute vessels of the kidney, clogging them, causing mechanical congestion, and finally either causing or attending a distinct diphtheritic process in the kidney analogous to that going on at the point of invasion. We observed in this epidemic of measles that the children would often exhibit extraordinary symptoms connected with the respiration. A child would be doing well, when suddenly it would seem to have difficulty in breathing. There would probably be, as is usual in such cases, a certain amount of pulmonary congestion and some catarrhal pneumonia, but at the same time the severity of the pulmonary lesions would not be in proportion to the disturbance of respiration which was present. The gasping spells were shown to be due to the fact that insufficient blood passed through the lungs to be oxygenated. There was no trouble about getting air into the lungs, but the trouble was to get venous blood from the right ventricle to travel into the lung. There was some obstruction. After death it was found to be due

to a white clot which had evidently formed some time before, and on microscopical examination this clot would be found to be filled with micrococci.

This is an extremely interesting subject, and those who have studied these conditions under the microscope have found that it was not only an interesting subject in itself, but one of great practical importance. I wish, to-day, in view of the present epidemic, to speak to you of some of the practical points which this matter brings before us. It is also of great importance in connection with treatment. From the experiments of Doctors Wood and Formad—experiments which have been verified and which are still going on—it has been proven that the initial lesion in cases of diphtheria is in the throat. It has for many years been a question whether diphtheria was like typhoid fever, scarlet fever, and other affections where the blood was first affected by the poison of the disease and a period of incubation resulted, and that this was finally followed by the peculiar characteristics of the disease, that is to say, the appearance of membrane in the throat in diphtheria, the scarlatinous rash in scarlet fever, and of rose-colored spots and so on in typhoid fever. These experiments have, I think, conclusively shown that diphtheria is a contagious disease, contagious from the membrane which is present, and that this contagious principle can be inoculated, can be transmitted directly to the individual, and also that it first appears upon that part where the inoculation has been performed independent of any lengthy period of incubation. If the membrane from a case of diphtheria is inoculated upon any part, it is at this point where the first manifestations will occur, while the constitutional disturbance will be of a secondary character. In all cases of diphtheria examination of the blood under the microscope shows the presence of these micrococci, and also that they first appear at the point of greatest intensity, or otherwise invasion, and thence make their way through the circulation to other parts of the body. In the primary stage they are found in the membrane, and in the epithelium on the surface of the tongue, mouth, and throat, and from these parts they rapidly penetrate into the submucous tissue, and finally are taken up by the bloodvessels and lymphatics, and develop with great intensity. These experimenters have declared that their observations have shown that diphtheria need not be a so-called specific affection; that in rabbits any inflammation of the mucous membrane of the throat may produce symptoms analogous to those of diphtheria with the presence of micrococci; they, at the same time, tell us that these micrococci are always found to a greater or less extent upon the mucous membrane of the throat and epithelial débris on the tongue of those in health, but not necessarily in the air which we breathe, unless it be foul. I can scarcely see my way clear to go as far as this, but believe that in a dormant state they may have their peculiar home in the epithelial detritus which is found in the mouth, and are deposited there and vivified by foul air from cesspool gases, and then if any irritation or denudation of the mucous membrane takes place from cold, from sore throat of any kind, especially in children, in whom there is a special vulnerability, these micrococci suddenly develop with great intensity and rapidly produce the malignancy which we see in the secondary manifestations of the diseases; their habitat being foul air, whence they are derived.

Let me here refer to the great error that is frequently made of calling one disease after another, *e.g.*, calling a sore throat *diphtheritic* because it has a membrane upon it, or a disease *typhoid* because it resembles typhus, or a rash *scarlatinous* because it resembles that of scarlet fever. The result of this is that people who

do not know what these terms mean imagine that they have these various diseases, and you will be often told that a person has diphtheria every fall, because some one has called it a diphtheritic sore throat, or that a child has had scarlet fever a dozen times, when in reality it has suffered from attacks of erythema, or a person has been *threatened* with a disease of this sort! This use of terms is objectionable to those who are trying to attain a scientific accuracy in regard to the diagnosis and treatment of these diseases, and raises doubts in the popular mind.

Diphtheria, though possibly a disease which may occur more than once, carries with it a certain individuality of its own. The poison, whether it be micrococci or not, requires something which will increase its activity, and will, under ordinary circumstances, lie dormant. It may remain for some time in a pure atmosphere, and not develop the disease; but if it is exposed to sewer gas or to bad ventilation, this growth, this cause of diphtheria, is vivified, producing usually the primary affection of the throat, and eventually involving the general system; or the contagion may be direct from one individual to another. Experiments have proved this, in the fact that the most virulent of micrococci, that of erysipelas, if exposed to air which is pure, or, in other words, to oxygen, loses its intensity, and when inoculated shows its enfeebled powers.

Is this disease identical with true croup or pseudo-membranous laryngitis? In certain cases it may be. Oertel, in Ziemssen's *Encyclopædia*, describes two forms of the disease—the catarrhal and the croupous. The first is the result of catarrhal inflammation, which he supposes to be due to the action of a small amount of poison on the throat membrane, giving rise to a mild form of catarrh. This catarrh may come from any irritation. It is no more due to the specific action of diphtheria poison than it is due to the inhalation of fumes of nitric acid or of any other irritating substance. It is simply a superficial catarrh similar to a catarrh in the head. Thus, if you inhale the dust of ipecac, you will set up as severe a catarrh as if you go out into the night air without your hat. Then again, we have that which is described as the croupous form, which may also be dependent upon a specific blood poison, and has attending it a fibrinous exudation, with rapid failure of the system following the introduction of the poison, producing adynamia. We know that ordinary causes, presumably not dependent on diphtheritic poison, may produce laryngitis with the deposit of membrane. Children with this disease present certain appearances and symptoms which are not like those that are seen in the early stages of diphtheria. Those of you who have seen the two affections side by side will, I think, agree with me in saying that they are not identical in appearance. In a case of pseudo-membranous laryngitis, the child may have deposits in the trachea which may so obstruct the tracheal opening as to cause great interference with respiration, yet until the fatal signs come on, the symptoms are not identical with those of diphtheria; there is not that profound prostration, that swelling about the neck and angle of the jaw which shows great involvement of the lymphatics, with enlargement of the glands. In the former disease, the lymphatics are not at all affected in the early stage; and, again, when I tell you that more or less membranous deposit may be readily caused by the least irritation, you can easily see that it is not necessary to always account for its presence by a violent poison acting upon its surface. In the most severe forms of diphtheria the disease, originating in the pharynx, has a tendency to extend into the nasal cavity. In some cases, in adults, the larynx escapes almost entirely, or again the primary lesion may be in the trachea. Diphtheria is not limited to young children, but is quite common between the ages of 10 and

age of 15 years, and is as fatal at these ages as it is at the same number of months. Pseudo-membranous laryngitis, on the other hand, is quite rare after the age of five years.

It was not my intention to-day to point out these differences. There are some authorities who believe that the two diseases are identical, while others take the opposite view. For my own part, I take a middle course. I think that diphtheria may cause croup, as may any other irritant; they may both be present in the same case, and probably are in children, and one may be the exciting cause of the other. There is in children a tendency for all catarrhal conditions of the mucous membrane of the air-passages to exist, and I think we may look upon pseudo-membranous laryngitis as a constant symptom of diphtheria at this age; still, we know that diphtheria can occur in adults without pseudo-membranous laryngitis being present, and that the latter can take place in children with abundant deposits, but unaccompanied by lymphatic involvement and adynamia, unless septicæmia should set in from putridity of the false membrane.

My purpose to-day is to make some remarks in connection with treatment. In treating those cases of measles to which I have alluded, we used large doses of alcohol, in the form of whiskey, and we found that it diminished the intensity of the malignant symptoms, and, at the same time, lessened the number of micrococci in the blood. We examined the blood and determined the number of micrococci present; the child was then placed upon full doses of whiskey, and examination of the blood then showed that the number of the micrococci had sensibly diminished, and that they seemed paralyzed in their development. They did not have that tendency to duplication which they had before shown. These investigations were continued by Mr. Oliver Hopkinson, at my suggestion, and he has obtained some extremely interesting results. I might as well state here that we are not able to distinguish under the microscope the different varieties of micrococci, as they present exactly the same appearance; still we may say that the micrococcus of diphtheria may differ from that of erysipelas or of measles, but that, though the virulence differs in each case, they are all affected, more or less, in their development by the administration of this same drug. Dr. J. G. Richardson very happily illustrated this point before the Philadelphia County Medical Society. He said that although these growths appeared exactly the same under the microscope, yet they could not be considered on that account as being the same; the spermatozoa of a colored man and those of a white man may look exactly alike under the microscope, yet we know that the spermatozoa of one would not produce the other, and we can illustrate it further by adding that they would succumb alike to the same toxic agents.

From the experiments to which I have alluded, we may conclude that any thing that will kill or retard the growth of these micrococci has the effect either of so paralyzing them as to prevent them from producing the malignant symptoms, or else of placing the blood of the individual in such a condition as to prevent the growth of the micrococcus. We find that the fatality of the disease accords with the presence of micrococci, and that if we can destroy the latter, we can diminish the former. As I have already said, alcohol has been found to have a curative effect. The same thing has been observed in regard to corrosive sublimate. The effect of this latter remedy was marked in the experiments of Mr. Hopkinson. He also found that chlorine and chlorine compounds exercised an even more pronounced effect. These experiments are very important. It has been known for many years that the

various compounds of chlorine, as chlorate of potassium, tincture of the chloride of iron, chloride of sodium, corrosive chloride of mercury, calomel and soda, chloride of lime, hydrochloric acid, and many others, had a curative or antidotal effect in these malignant conditions, or in what has been termed septicæmia. I believe that in all cases of this kind we have two different conditions; one is this tendency to malignancy accompanying the increased growth of these micrococci, which may be prevented by the use of alcohol, chlorine, and the like; the other is a septicæmia, associated with the other, resulting from a condition which is entirely different from the former, and where we have under the microscope micrococci and rod-like bacteria, due to decomposition and putridity. These latter produce symptoms of septicæmia, which are associated with those produced by the specific poison. We know that carbolic acid prevents the development of the rod-like bacteria, but it has been stated that this drug has no effect on the micrococcus. We find, by experiments on animals, that if a certain number be poisoned with the poison of erysipelas, diphtheria, they will die; while if others, poisoned in the same way, at the same time receive injections of chlorine water, they will live; and when we find that these experiments are made day after day with the same result, the logical conclusion to which we arrive at present is that, to some extent—how great we can not now say—chlorine and its compounds are antidotal to these diseases.

To review this subject, we have noted that micrococci are associated with diphtheria, that inoculation of these matters will produce the disease, that they are found at that point where the diphtheritic process is found in the greatest intensity, and lastly that certain solutions will kill or paralyze these micrococci, and prevent their growth. Let us now study a form of treatment based upon these views. We divide our treatment into the constitutional and the local. For the former we rely on hourly administration of liquid food in small quantities, such as beef-juice, wine-whey, milk, frozen beef-tea, or ice cream, albumen water, or peptonized food by the bowel; also stimulants, fresh vegetable acids, koumiss; and drugs, as quinine, strychnine, etc. We must pay a special attention to the circulation, as *heart death* may occur in two ways: first, syncope from fatty degeneration of the cardiac muscle; and sudden death, occurring even during convalescence. This requires absolute quiet in bed, digitalis, and strychnine. Second, heart clot, which is most insidious in its formation, and which, I believe, may be due to the rapidly accumulating micrococci, which can possibly be prevented by free stimulation, chlorine, and the chlorides, both internally and by inhalation, and *fresh air*. The local treatment has three objects in view, namely, the destruction of the diphtheritic poison or germ; the prevention of putridity of the false membrane, and the allaying of the inflammation of the mucous membrane itself. It is necessary for the latter indication to keep the air moist; either by the slaking of lime, to which may be added the vapor of the chloride of lime; vaporizing the throat by means of an atomizer, to which may be added opium or hyoscyamus in some form, and applying moisture to the throat without, either with a wet cravat covered with oil silk or a light poultice surrounding the neck. For the treatment of diphtheria I would recommend astringent local applications, as, for instance, the perchloride of iron, believing that the disease is originally a local affection. I would not waste time in using carbolic acid alone, for I believe that in such cases, at the onset, it is of questionable use. An excellent local application, which should be used daily by the physician, applied thoroughly to the whole mucous membrane of the fauces, is:

R.—Tinct. iodin.,	fʒj.
Acid. carbol.,	gr. x.
Tinct. ferri perchlor.,	fʒj.
Glycerinæ,	ad. fʒj.

The use of the carbolic acid being to prevent decomposition of the membrane. Between times I have used a gargle of salicylic acid and claret. Common salt, I have no doubt, would be of great service, and probably the popular opinion so favorable to chloride of sodium and sulphur will be found to be based upon a very solid foundation. You know that calomel and soda, in small and frequently repeated doses, placed dry upon the tongue, has many upholders, and probably its local action is a very important one, as much so as the constitutional one in rendering the membrane aplastic. Labarque's solution would be certainly indicated, and possibly the very valuable Platt's chlorides would serve the same good purpose.

But remember the importance of early local treatment with strong astringent applications, in proportion to the severity of the attack. The presence of false membrane will be followed by *two* evil results: mechanical obstruction, which will cause death; and its decomposition, which will produce septicæmia. These are both totally independent of the disease itself, and may be classed as complications, though in reality they are taken as symptoms.

Early tracheotomy may, but most frequently does not, prevent the former; quinine, iron, and food, with local antiseptics may ward off the latter, provided the hidden and unapproachable recesses of the nasal cavities do not render local treatment impossible, and constitutional supporting treatment unavailing. I would then give brandy in gradually increasing doses, giving it in proportion to the age of the patient and his condition, and at the same time administer chlorine in some of its forms, as tincture of the chloride of iron, or chlorine water (fʒj or less, three or four times daily, and increasing dose), which has been advocated for a long time by Dr. J. L. Ludlow, of this city, and which has been used by him with great success. I would use the vapor of chlorine in the room.

R.—Sodium chloride,	7½ parts.
Bin-oxide of manganese,	6 "
Add strong sulphuric acid,	q. s. (Edis.)

Dr. William Pepper recently reported a case of very severe diphtheria cured by the use of large doses of corrosive sublimate. Chlorate of sodium has been used with success by Dr. Ludlow, and is more soluble than the chlorate of potassium, and therefore more quickly enters the system. It can be given in eight or ten-grain doses every three or four hours. Here you see that the experiments in the laboratory have a practical value. They give us something tangible to work on. We find that chlorine does good; we use it and its compounds locally, freely, at first upon the mucous membrane itself, because we know that this is the initial point at which the disease originates. We try to kill or paralyze this micrococcus before it enters the circulation, for after it passes into the blood it is difficult to influence it. A curious confirmation in regard to this is found in the article by Prof. Oertel. He suggests that when the throat is very much involved, when the swelling in the connective tissue is great, when there is marked stiffness of the muscles of deglutition and great redness and the appearance of membrane on the throat, a hot poultice should be applied to the outside, for the purpose of encouraging suppuration, believing that by increasing the afflux of blood to the submucous tissue of the throat, and increasing in that way the tendency to suppuration, there is a barrier erected to throw off this poison and prevent its absorption. We cause

a layer of pus to develop, and the entrance of these micrococci can be then prevented.

If the poison of diphtheria, the micrococcus of that disease, is found constantly with the epithelial detritus upon the tongue and throat and other mucous membranes, and needs but foul air, absence of oxygen, debilitated constitution, and an abrasion to awaken it from its downcast condition, why can not auto-infection take place in many cases apart from exposure to a contagium of the same kind from without? Could not membranous deposit from simple catarrh, or pseudo-membranous laryngitis with decomposition of the membrane be the exciting cause, and diphtheria be engorged by an exciting cause from *within* as well as by bad sewerage from faulty closet, or infected drinking water? I believe that septic or decomposing matters will rapidly vitalize the diphtheritic micrococcus in the throat and fauces, as well as in the uterus and vagina, and I also believe that apart from that the micrococcus will develop symptoms of malignancy independent of septicæmia alone. In the former iron, quinine, alcohol, and chlorine compounds should be used largely internally, and carbolic acid as an application, with a free supply of oxygen and nourishment; in the latter cases, alcohol, nourishment, fresh air, the chlorine compounds, and vegetable acids are your sheet-anchor—with local astringents.

Although these points which I have brought before you to-day are the results of theory, I should not have presented them if they had not been confirmed by practice. We know that these various compounds of chlorine have been used with good results, and we simply endeavor to connect the theory and the practice, to show why these remedies have proven of benefit.

ORIGINAL ARTICLES.

CLINICAL REMARKS ON SEVERAL CASES OF PANCREATIC DISEASE.

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(Concluded from page 68.)

TUMORS and degenerations of the glandular tissue of the pancreas are the lesions of this organ most frequently demonstrated at autopsies. Indeed, judging from the great frequency with which I have met with both of these lesions, they must be of really common occurrence. Cirrhosis, or fatty degeneration, of the pancreas will often be found as an associated lesion in cases of similar disease of the liver or kidneys; cancer not rarely attacks the pancreas, even in early life. The youngest patient in whom I have seen it was a boy of 12½ years, who, apparently in consequence of an injury to the abdomen, had a rapidly growing encephaloïd cancer of the pancreas, involving also the left kidney and the transverse colon. The vomiting in this case was the prominent symptom, no nutrient being retained; and I am led to remark this because I have lately seen several times the statement that an absence of gastric symptoms is a point in favor of implication of the pancreas in studying cases of obscure abdominal disease. My own experience would certainly not corroborate this statement; since I have too often noted vomiting, even of frequent and uncontrollable character, in pancreatic disease, to allow me to consider its absence,

though it undoubtedly is absent in some cases, of any diagnostic value. But frequent as these forms of pancreatic disease are, it seems to me that simple catarrhal inflammation must be of vastly more common occurrence, although, for obvious reasons, it is difficult in many instances to determine its existence. It cannot scarcely be otherwise when we come to consider the extreme frequency of catarrhal inflammation of the duodenum and bile-ducts, and the close anatomical and physiological relations of the pancreatic ducts with these parts. There are indeed on record a sufficient number of fatal cases of chronic pancreatic catarrh, with the fullest development of secondary lesions of the gland, to show that even the worst forms of this disease are not extremely rare. The symptoms in such cases (of which a most interesting unpublished one, communicated to me by my friend, Dr. R. G. Curtin,¹ might serve as a type) are dull, deep-seated pain in the region of the pancreas, with occasional attacks of sharp, or even severe colicky pain; gastric derangement; intestinal indigestion; diarrhoea, with slippery stools, or with free oil in the stools; emaciation and anaemia; occasionally diabetes or oedema. It is probable that the colicky attacks are at least occasionally due to the passage of small concretions through the pancreatic duct into the duodenum. In milder forms of catarrh, however, the symptoms must be much less severe, and I have no doubt that many cases of pancreatic catarrh are overlooked or are regarded as cases of gastro-duodenal or duodenal-hepatic catarrh. Such cases we should naturally expect to be attended with a clean, moist tongue, epigastric distress, occasional sharp abdominal pain, intestinal flatulence, with tendency to diarrhoea, and absence of jaundice or of enlargement of the liver. Careful examination would probably show an undue proportion of unaltered fat in the stools; and when the swelling of the mucous membrane is sufficient to close the main duct there may be temporary diabetes.

Pancreatic catarrh may occur in an acute form, or it may run a chronic course. In the latter case it undoubtedly constitutes the lesion and essential cause of a certain number of those troublesome cases attended with chronic intestinal dyspepsia, persistent leanness despite correct regimen and careful feeding, and a tendency to looseness of the bowels on the slightest provocation. It has occurred to me also that chronic pancreatic catarrh is at the root of some of the cases of mild intermittent diabetes, which are not rarely met with. I am now engaged in studying two cases where, with the occasional increase in percentage of glucose in the urine, there is temporary loss of weight, and intestinal dyspepsia, with tendency to looseness of bowels. I am anxious to determine if at such times there is an undue amount of unaltered fat in the stools.

We are very familiar with the close and reciprocal relations between catarrhal inflammation and calculous affections of various parts, and it is not only

in cases of catarrh of indeterminate location that the possibility of pancreatic implication should be carefully considered, but also in that large and often obscure class of cases where repeated attacks occur, of severe colicky pain about the epigastrum, without jaundice, and where no gall-stones are discoverable in the stools. The following case, of very recent occurrence, may be cited in illustration:

CASE III.—Mr. ——, 45 years of age, a man with large responsibilities, but who took care of himself and was rather fond of good living, had his first spell of colic while abroad. It came on suddenly, with intense pain in the epigastrum, vomiting, coldness of the extremities, and a feeling of collapse. The attack was very severe and lasted several hours; it was followed by weakness, but by no jaundice or discoloration of the urine. A second similar attack occurred in 6 months, a third about 4 months later; and thereafter they occurred for a number of months with varying severity, and at gradually lessening intervals, until he had an attack every two or three days. The pain in all cases was of the same character—acute, sharp, cutting, or tearing; and in the same locality—deep-seated in the epigastrum and through to the back. Nausea and vomiting often attended, and there was always a haggard, pinched expression of face, with cold extremities. At no time was there the least jaundice or discoloration of the urine, and the feces were not pale. The bowels were usually constipated; no free oil was ever noted in the stools; and several careful examinations of the feces for calculi failed to discover any. Careful palpation of the abdomen failed to reveal any tumor or enlargement of any organ, and there was undue tenderness only at one point corresponding to the position of the head of the pancreas, and developed only by deep pressure. There were marked anaemia and loss of flesh, and the complexion assumed an earthy, slightly sallow, cachectic look. The digestive power was much impaired, and the amount of food that could be taken was of necessity gradually reduced, until the diet consisted of small quantities of butter-milk, skim-milk, or broth, at short intervals. Under a course of this diet, with strict rest in bed and the internal use of a pill of nitrate of silver and opium, and subsequently of quinine, belladonna, and arsenic, gradual improvement occurred, and for nearly five weeks there was no spell of pain, while the power of taking food improved decidedly though slowly, and there was a gain in general condition. Without adequate cause, however, there was a return of severe spells of pain, occurring at intervals of one, two, or three days, and at varying hours, and without any fixed relation to the indigestion of food. The attacks lasted over a period of about two weeks, toward the close of which time the pain was very severe and almost constant, and scarcely any food could be taken; the loss of flesh during this time was remarkably rapid. After reaching a state of great intensity, there was a quite sudden decrease and disappearance of pain; and in a few days solid food could be taken. The patient left bed, and was soon able to go out and to gradually return to business. He continued to improve, though digestion

¹ It formed the basis of a paper read by Dr. Curtin before the Pennsylvania State Medical Society, in 1882, at Lancaster.

remained somewhat weak and sensitive, for nine or ten months, when a single isolated attack of great severity again occurred in the summer of 1882, while he was abroad.

All of the attacks in this interesting case were of similar character, and the differential diagnosis seems to possess no little difficulty. In many respects the case resembled one of gastralgia, and in default of my ability to actually prove it otherwise, this view may be entertained by some. There are various points, however, on which a different opinion may be based. The extreme suddenness and violence of the first attacks, their isolated and widely separated occurrence, and that too under unusually favorable hygienic conditions, which would have rendered the onset of gastralgia at that time unlikely; the absence of regularity as to time of day, or as to relation to the hours of taking food; the obstinate recurrence of the spells despite careful diet and treatment; the sudden reappearance of a violent attack after four weeks' absence, while the patient still continued in bed and upon careful diet; the abrupt cessation just when apparently most violent and continuous; the sudden reappearance, after nine or ten month's freedom, of a single isolated attack; the absence of gastric symptoms in the intervals of the attacks; all of these point rather in the direction of a calculous disorder than of gastralgia. It is certain that if with these attacks there had been recurring jaundice, and if the pain had been rather higher and more to the right, the character of the spells and the course of the case would have made the attending physician, Dr. Dunton, and myself confidently suspect the presence of numerous gall-stones. Indeed, it cannot be regarded as impossible for such to have been the case. I have had several times seen repeated attacks of hepatic colic of marked severity where no jaundice followed, and no gall-stones were discoverable in the stools. Such cases have depended either on the passage of fine biliary gravel too small to occlude the duct or to be found in the stools, or on the presence of a single large rounded calculus incarcerated in the gall-bladder, and producing occasional attacks of colic by becoming temporarily engaged at the opening of the cystic duct. These conditions have been verified by post-mortem examinations in the cases above referred to. But further, I have recently had shown to me twelve or fifteen small pyramidal calculi, evidently of hepatic origin, which had been found in the stools of a middle-aged woman after a series of attacks of severe colic, in which the pain was referred exclusively to the epigastrum, and which were unaccompanied by the slightest tinge of jaundice, apparently because the comparatively small size and the pyramidal shape of the calculi had not allowed the occurrence of sufficient obstruction of the common bile-duct while in transit.

While, however, it is not impossible that the passage of small biliary calculi may have occasioned the successive attacks in the case here reported, I am forced to consider whether their real cause may not have been the presence of one or more large or of numerous minute pancreatic concretions. When

we consider the anatomical arrangement of the pancreatic duct and its close relations with the duodenum, as well as the composition of the secretion of this gland, it seems impossible not to believe that pancreatic calculi are of far more common occurrence than is usually received. The great majority of biliary calculi are undoubtedly formed in the gall-bladder, but still a considerable number of concretions occur in the minute bile-ducts. So, while the absence of any similar reservoir in connection with the pancreas must explain the comparative rarity of pancreatic concretions, the arrangement of the minute ducts, the liability of the flow of the secretion to be retarded by narrowing of the main duct from catarrh of its mucous membrane, and the character of the secretion itself, must lead, in not very infrequent instances, into the formation of concretions in the small ducts. From the valuable inaugural thesis of my friend and former student, Dr. George Woodruff Johnston (Univ. of Penna., 1882), in which are tabulated the results of an exhaustive study of the literature of pancreatic concretions, it appears that, including the case to be reported hereafter, there are only 35 cases known where the presence of such a concretion has been demonstrated by post-mortem examination. In most of these cases the concretion was large, and had contributed in large measure to the fatal result; and I do not feel that we can draw any conclusion from the above figures as to the frequency with which minute pancreatic concretions have been passed during life, or have been imbedded in the gland and not discovered in the post-mortem examination, which so rarely includes careful examination of this gland. In cases of large concretions, usually associated with enlargement, cystic dilatation, chronic inflammation, or other grave organic change in the gland, the symptoms have been very varied, embracing pressure on the vena cava, with production of oedema and ascites; jaundice from pressure on the common bile duct; gastro-intestinal derangement, with vomiting (occasionally bloody) or diarrhoea, sometimes with fatty, sometimes with bloody, stools; or more rarely with constipation; diabetes in some cases; emaciation and anaemia; dull, deep-seated pain in the epigastrum, and occasional spells of sharp, colicky pain; tenderness on pressure; a sense of deep-seated resistance or a tumor on deep palpation. In a case of simple chronic catarrh, however, with minute concretions passing into the duodenum, it is clear that comparatively few of these grave symptoms would occur. Such a case would probably present only the symptoms mentioned on a previous page, together with slight deep-seated tenderness over the site of the pancreas; some dull, deep-seated pain or sense of discomfort and occasional spells of pancreatic colic, characterized by severe sharp pain in the epigastrum, or extending thence to the back, and unattended by jaundice. Without assuming that a diagnosis of pancreatic calculi has been established conclusively for the above case, I hope enough has been said to invite attention to the possibility of such an explanation in analogous cases.

In the following interesting case the pathological condition was very complicated, so that once more the pathological affinities of the pancreas are well illustrated. The occurrence of persistent diabetes in connection with permanent occlusion of the pancreatic duct is instructive; but the numerous lesions present render any minute analysis of the symptoms unsatisfactory.

CASE IV. Jaundice; saccharine diabetes; general atheroma and calcification of arteries; enlargement of liver and dilatation of gall-bladder, with occluded cystic duct; enlargement and cystic disease of pancreas, with large and small concretions; catarrhal nephritis; valvular disease of heart.—Jacob Snyder died in the University Hospital, aged 62. His general health had been fair, and he had worked hard, but rather unsuccessfully. At 30 years of age, he had a bubo following a venereal sore, but no subsequent secondary symptoms. He was always sensitive to atmospheric changes, and had occasional slight rheumatic attacks. For two years previously he had been sick; at first with constipation, alternating with slight diarrhoea, but for the past ten months the stools were clay-colored, offensive, and usually costive. No report exists of any free fat detected in the stools. Up to a very late period, the appetite was good, or at times even voracious, and there was no nausea, pyrosis, or vomiting; but still he lost flesh and strength considerably. For a year there had been frequent paroxysms of sharp pain in epigastrium and right hypochondrium, radiating to the right shoulder, over the chest, and through to the back. There was troublesome flatulence, which seemed to increase the pains. Deep jaundice had existed for nine months, and for nearly the same time a slowly growing mass had been observed in the median line about three inches below the xiphoid cartilage. The emaciation was marked; two months before death he had fallen from 165 to 125 pounds. The heart's action was slow; the area of dulness was increased; there was a strong systolic aortic murmur, and also a strong presystolic murmur at the mitral orifice, and a distinct precordial thrill. For two months prior to death, the feet were edematous. The urine contained eight per cent. glucose, a small amount of albumen and bile pigment, but no bile acid (Pettenkoffer's modified test). The liver was greatly enlarged and indurated, and the gall-bladder was so much distended that it could readily be detected through the abdominal walls. The epigastric tumor first mentioned was distinct from this distended gall-bladder, and, although readily discoverable, was deep-seated, immovable, hard, and moderately painful. He was admitted to the hospital Sept. 5, 1879. The treatment adopted was a pill of inspissated ox-gall and ext. gentian thrice daily, and a mixture containing bichloride of mercury $\frac{1}{16}$, iodide of potassium gr. vi, tincture digitalis gtt. x, thrice daily, in water. There was a marked improvement in the jaundice, and he gained weight and strength for about three weeks; from this time he sank quite rapidly, with increasing edema and ascites, and died Oct. 7, 1879.

The post-mortem examination revealed hyper-

trophy of the heart, and marked stenosis, with calcareous deposits, of the mitral and aortic valves, and intense atheroma and calcification of the aorta and smaller arteries. The abdominal cavity contained a large quantity, and each pleural sac about two pints, of clear straw-colored fluid. The liver was heavy, enlarged, indurated, and roughened, and on section showed cirrhosis with nutmeg congestion. The gall-bladder was greatly distended and dilated; the fluid contained bile, a large amount of cholesterine, pus, red blood-corpuscles, but no sugar. The cystic duct was occluded by adhesion of its walls from pressure of the diseased pancreas. The hepatic and common bile-duct were pervious, but must have been somewhat compressed during life. The minute bile-ducts were found to be dilated, and Dr. Formad found "cavernous degeneration" (Klebs) of the minute bloodvessels of the liver. No gall-stones were found anywhere. There was chronic catarrhal nephritis of the kidneys. The pancreas was extensively diseased; the head was especially enlarged, forming the tumor detected during life, and so situated as to have compressed the bile-ducts; the organ was indurated and heavy. On section of the tumor formed by the head of the pancreas, one large and several small cysts were found, surrounded by hard, cirrhotic tissue. The hypertrophied connective tissue between the glandular elements was impregnated with crystalline and amorphous lime salts. The walls of the cysts were composed of connective tissue, lined by columnar epithelium, showing them to be distention cysts, developed from some of the follicles of the gland. There were also small pseudo-cysts in the other portion of the gland, formed by distention of the minute branches of the pancreatic duct. The larger cysts were filled with a dark liquid, which showed under the microscope crystals of cholesterine and triple phosphates, pus, red blood-globules, columnar epithelium, and some pigmented cells; chemically neither sugar nor bile could be detected. There were some small pancreatic concretions in these cysts, and in one place a branching distended portion of the duct was completely occluded by a large branching calculus, which is accurately represented three times the natural size in the accompanying wood-cut. The pancreatic duct could not be traced to its termination either in the duodenum or the common bile-duct, and it had evidently been totally occluded for a long time.



Pancreatic calculi differ widely from gall-stones in appearance and in composition. They are light,

porous, grayish, cylindrical, branching, sometimes tubular. An analysis of one gave the following results:

Phosphate of lime,	72.30
Carbonate of lime,	18.90
Phosphate of sodium,	trace
Animal matter,	8.80
	100.

Such calculi have been known to escape into the duodenum; or by rupture of a cyst to escape into the abdominal cavity, or to be discharged from an abscess pointing in the lumbar region. It seems to me altogether probable that, in this case, several minute concretions may have passed into the duodenum at an earlier period of its history, explaining, in the absence of gall-stones, the paroxysmal attacks of pain. In this connection, allusion may be made to Case III. My space will not permit an adequate discussion of the interesting question of treatment involved in such cases as are here reported. It would include a consideration of the careful hygienic and therapeutic course required for the successful management of cases of duodenal-hepatic catarrh; together with those special dietary precautions by which may be obviated, as far as possible, the ill results of partial or complete interference with the flow of the pancreatic secretion into the bowel.

DIABETES MELLITUS FOLLOWING ABSCESS OF THE GALL-BLADDER; DEATH FROM COMA.

BY GEORGE S. HULL, M.D.,
OF CHAMBERSBURG, PA.

IN December, 1879, I was called to see Mr. A. S., a tailor, and found him suffering with severe pain in lower right hypochondrium. He described the pain as burning, throbbing, and occasionally lancinating. It dated back a number of weeks, and had been increasing in severity daily, being accompanied by continued fever and progressive emaciation. At this time he was wasted in the extreme, with a quick, small pulse, and an evening temperature of 101° . Appetite was poor and bowels very much constipated. He was not cachectic, nor could any family history of carcinoma be elicited. Upon examination, there was found quite a bulging over lower right lobe of liver, the swelling having a smooth, hard feeling. Poultices were applied, and quinine and nitromuriatic acid administered; the bowels being regulated by pulv. glycyrr. comp. Nourishing foods, chiefly milk and beef-tea, were given freely. The patient held his own for several weeks, when, the swelling having increased considerably, some distant fluctuation could be detected. The aspirator was used, and about an ounce of thick, grayish muco-pus was with difficulty removed. Poultices were reapplied, and in a few days a deep incision made over the point of puncture. The pus flowed readily, though the amount contained in the abscess was not very great. The patient began immediately to improve, and soon regained his usual weight and resumed his occupation. However, the

opening into the abscess refused to close, and kept oozing a pale, thin, sticky fluid. This did not give him any inconvenience other than the keeping of some absorbing material over the orifice. Occasionally the discharge would cease for a day or two, when he would complain of a burning pain, which was readily relieved by the application of a poultice, the discharge reappearing. A probe could be passed into the sinus but a short distance when it was arrested by a deflection which could not be followed. Palpation revealed nothing; the surface of the liver was smooth and its size seemed normal. Although the abscess was near the region of the gall-bladder, nothing of its contour could be felt, and no trace of bile could be found in the discharge.

About one year after this illness the man, who had been pursuing his business actively, often boasting of his good health, came to consult me about some "bladder trouble," which he said had been annoying him for some weeks past. He micturated very frequently, especially at night, and passed large quantities of water. His tongue was pasty and slightly coated. He complained of his mouth being dry, and of a burning sensation in his stomach, compelling him to drink large quantities of water; said he was feeling weak, especially in the limbs, and that the weakness and other symptoms had been coming on gradually during the last month or two. His appetite was fairly good and his bowels regular; no fever was apparent.

An examination of his urine showed it to contain a trace of albumen and a large quantity of glucose, its sp. gr. being 1030, and the amount voided daily about ten pints.

He was put upon the usual diabetic diet, and given $\frac{1}{4}$ gr. calcium sulphide four times daily. After taking the remedy five days, during which time his urine was steadily decreasing in amount, and in sp. gr. also, he became so nauseated by the unpleasant eructations that it had to be discontinued. Fluid extract of ergot was substituted, and only given a couple days, when a sudden fever lighted up, the temperature reaching $102\frac{1}{2}^{\circ}$ at night. There was also an increase in amount and density of the urine. Tincture of aconite root was given in three drop doses every two hours, the ergot being withdrawn, and in twenty-four hours the fever had left and did not return. The urine was again tested and found to contain no albumen, and but a trace of sugar, the amount passed, however, was double that of normal. The aconite was continued several days, thinking it might have been influential in causing the sudden disappearance of the sugar, etc., but the result was disastrous, the urine in two days rising in sp. gr. to 1032, and in amount to twelve pints daily. He was now prevailed upon to take the calcium sulphide again, and it was given in $\frac{1}{2}$ grain doses every three hours. In three days he was passing about nine pints daily, having a sp. gr. of 1019. Bowels regular; tongue still dry; feeling brighter. Sulphide reduced to $\frac{1}{3}$ grain every three hours.

Jan. 14.—(Two days later) eight pints; sp. gr. 1020.

16th.—Seven pints, sp. gr. 1016. But a slight trace of glucose by Fehling's test; no albumen. Tongue becoming moist. Calcium sulphide $\frac{1}{4}$ grain four times a day.

21st.—Sp. gr. 1020, but little above the normal amount. Tongue moist; appetite very good; gaining in strength.

24th.—Sp. gr. 1019; amount normal. Discontinued sulphide, which had produced no disagreeable symptoms this time, the patient bearing cheerfully with the unpleasant taste and foul eructations, when he realized what good it was accomplishing for him. For one week after stopping the medicine the diabetic regimen was enforced, and then a gradual return to ordinary diet allowed. There was no reappearance of any of the symptoms, and he soon regained his usual weight and applied himself again to his trade. During this attack the sinus discharged the usual amount of thin mucus and gave him no uneasiness at all.

On the evening of April 12 (seventy-eight days since last treatment) was called to see Mr. S. He had been working unusually hard for a couple of weeks past, in order to start his son in business. Found his pulse 100; temperature 102°; skin and tongue dry; face flushed; occasional slight chills; no pain; no increase in amount of urine. The flow from sinus had ceased and to this he attributed all his symptoms. Aconite was freely given and a poultice applied to side. Although the urine contained neither glucose nor albumen, yet, fearing a return of the glycosuria, $\frac{1}{4}$ grain calcium sulphide was ordered to be given four times a day.

April 13.—A.M. Pulse 90; temperature 100°. Urine rather scanty; no sugar; no albumen. Feeling better. In the evening had several light chills, and fever rose to 102°; pulse 110. Aconite discontinued; eight grains of quinine given.

14th.—Perspired freely during night, no fever this morning. Sinus discharging again and patient feeling greatly relieved. For six days he remained free from fever and pain; complained only of great weakness. As there was no increase in the amount of urine and no sugar present, the sulphide was discontinued, and a more liberal diet allowed. His appetite was good, and between meals he partook freely of milk, egg-nog, etc., all of which he retained, but without adding to his strength. He now began to fail rapidly, complaining of great weakness and shortness of breath (his inspirations were deep, though hurried). He seemed very anxious, occasionally restless; had no pain whatever, although his groanings were loud and frequent. He conversed but little; had no fear of death, though he seemed to realize his hopeless condition. Even at this time his urine contained neither sugar nor albumen, nor was any fever present, although his pulse was rapid. He took freely of stimulating drinks, yet gradually sank into coma, which deepened till it ended in death.

A general *post-mortem* examination was not allowed, only permission given to examine the seat of abscess. Accordingly, seven hours after death, the abdominal cavity was opened. The gall-bladder was found adherent to abdominal wall, omentum

and a portion of the small intestine. A probe inserted at external opening of fistula (which was three inches to right and one inch above umbilicus) was pushed with difficulty through a tortuous route of three inches into the gall-bladder, where it impinged against a hard substance. The gall-bladder was opened and found to contain fifteen gall-stones, varying from the size of a grain of wheat to one whose largest circumference measured $4\frac{1}{2}$ inches, and whose weight, when dried, was 246 grains. Besides the stones there were present in the gall-bladder about two drachms of grayish mucus; no bile. The walls of the bladder were very much thickened and moulded closely around the calculi. There were no signs of recent inflammation; no fluid in abdominal cavity. Nothing abnormal could be detected in appearance of liver, however a section was secured for the microscope; the gall-bladder and contents were also taken. A microscopic examination of the liver yielded nothing of importance; the tissue was not stained with bile and was but very slightly fatty. The walls of gall-bladder were very much hypertrophied.

One would naturally look to the condition of the gall-bladder for the cause of the diabetes in this case, and, indeed, with good reason, in these days when so much light is being thrown upon this once "incurable disease." A thorough examination of the brain with negative results, had such an examination been permitted, would make one more positive in this opinion; however, the man had no history of injury, sunstroke, etc. etc., that would lead to any suspicion of brain disease. It is well known that disease of the cerebrum, cerebellum, and pons, and irritation applied to the floor of the fourth ventricle will produce diabetes mellitus; also is it accepted that the disease may be produced reflexly by irritation applied to the ends of the vagus in the liver, lungs, or intestines (tape-worm has been known to be the sole cause of a bad attack).

Here, with the irritation caused by the large mass of calculi, the fistulous opening into the gall-bladder and the adhesions to omentum, intestine, and abdominal wall, we certainly have a fruitful source of irritation to the ends of the vagus, and why not attribute the diabetes to the reflex irritation from these causes?

Concerning the treatment, the calcium sulphide (suggested first, I believe, by Dr. Husted) seemed to do wonders. Its withdrawal in the beginning of the treatment, on account of its causing nausea, and the substitution of ergot and aconite were disastrous, the patient soon becoming worse than at first. However, upon resuming the sulphide, its good effects were soon again manifested, and the patient *cured*—unless the fatal attack, nearly three months later, could be called *diabetic coma*, in spite of the absence of sugar from the urine. The term *diabetic coma*, however, embraces so much that we might indeed bring this sudden death under its far-reaching appellation. If acetonæmia be the sole cause of the coma, there were no striking symptoms of its presence in this case. The blood was not examined for acetone, but the breath had no characteristic

odor, nor had the cadaver when opened. If, however, diabetic coma be due to some lesion of the sympathetic system (as suggested by Teschemacher) causing shock from reflex paralysis of the vaso-motor nerves, the symptoms were striking indeed.

After months of hard labor, especially mental, the patient, a poor man, finally succeeded in establishing his son in business; then, the strain being over, found himself exhausted; rallied a little, then rapidly sank into coma and died—very much indeed as a man would die from the shock consequent upon a formidable surgical operation.

MEDICAL PROGRESS.

INOCULATION IN PANNUS.—DR. LOUIS L. SEAMAN reports that at the Charity Hospital the ophthalmic surgeons have resorted to inoculation in six obstinate and exaggerated cases of pannus, with the following results: First patient, totally blind in both eyes for several years was inoculated with gonorrhœal pus; discharged in April last, at his own request, as he desired to get work; vision in one eye 10-200, and 2-200 in the other. His sight has undoubtedly doubled since, though every effort to find the party has been unsuccessful. This patient had an attendant for some years previously and had been most of the time under treatment. Second and third patients had perception of light in one eye, while with the other, each patient could count fingers at the distance of a foot (1-200). Both were inoculated with a traumatic urethral discharge, which ceased after ten days' treatment. The purulent ophthalmia was very severe in all four eyes and continued for seven weeks, during which time the patients had a special nurse, night and day; and though in open ward, they were successfully secluded from the other patients by means of screens. The results of the inoculation were as follows: Second patient, right eye with white leukoma (large iridectomy previously made) and partial pannus; vision, 6-100; left eye, 12-100. Third patient, right eye, vision, 20-100; left eye, perforated cornea and perception of a moving object at a distance of two feet. These results are worthy of consideration, though the procedure is confessedly severe.—*Report of Ophthalmic Division of Charity Hospital, Blackwell Island, 1882.*

ABNORMAL DISTRIBUTION OF ARTERIES AT BASE OF BRAIN.—Abnormal arrangement of arteries in the circle of Willis is rare. At a recent autopsy such an irregularity was noticed by S. G. WEBBER, M.D. The two anterior cerebral arteries came so near each other that the anterior communicating artery was only about one line in length. The right posterior communicating artery was only about one-tenth the usual diameter, the right posterior cerebral artery was twice the usual size, or larger. The left posterior communicating artery was nearly twice the usual size, and virtually was the origin of the posterior cerebral; the left posterior cerebral was about half the usual size until it met the posterior communicating. Thus the region supplied by the right posterior cerebral artery received very nearly all its blood through the basilar; that supplied by the left posterior cerebral artery received more than three-fourths its blood through the left carotid. The right posterior cerebellar was so small that it could not be distinguished from other small and terminal arteries. Its place was taken by one of the branches from the basilar, which was larger than usual, and, after passing backwards and upwards over the surface of the cerebellum, curved forwards and downwards to occupy

the normal position of the posterior cerebellar between the cerebellum and medulla. The basilar artery was rather longer than usual, the vertebrals uniting at a lower level than normal. The middle cerebral arteries and the anterior cerebellar arteries were normal.—*Boston Medical and Surgical Journal*, Dec. 7, 1882.

FRACTURE OF THE CRICOID CARTILAGE.—DR. MASUCCI reports a case of fracture of the cricoïd cartilage followed by cure. The rarity of this lesion and the conflicting accounts as to the mechanism of its production, led him to make a number of experiments on cadavers and dogs, in which the various conditions were imitated in which this lesion could be produced. He found that to produce a fracture of the laryngeal cartilages, a certain degree of ossification must be present, and the larynx must be fixed by muscular action, the blow or violence must be on the larynx directly from before backwards, and not obliquely or laterally; otherwise the larynx will be displaced and not fractured. Asphyxia and aphonia are constant symptoms, and the former, unless treatment is energetic, will be the cause of death: crepitus, emphysema, and dysphagia are also present with the other signs of violence, such as ecchymosis, edema of the neck, etc. M. Masucci also observed a condition of convulsive trembling of the sub-hyoid muscles.—*Rev. Mens. de Laryngol. d' Otol. et de Rhinologie*, November, 1882.

TWO SUCCESSFUL CASES OF CHOLECYSTOTOMY.—MR. LAWSON TAIT reports the following cases. The first was that of a lady aged 28, with obstruction of the cystic duct from gall-stones. The abdomen was opened by a vertical incision over the tumor, which proved to be the distended gall-bladder. He emptied it by the aspirator, removing about a pint of thick glairy mucus. He then laid it open, and removed about eighty gall-stones of small size, the largest weighing fifteen grains. They were removed chiefly by the use of a *curette*.

He then stitched the aperture in the gall-bladder to the wound in the abdominal wall, carefully closing the peritoneum, and leaving a drainage-tube in the gall-bladder. The patient's recovery was uninterrupted; the highest temperature recorded was 100.4°, and the highest pulse record 84. The stitches were removed on the eighth day, the drainage-tube on the twentieth day, and in ten days more only a small sinus was left, from which some mucus still continues to be discharged. The patient has gained flesh since the operation, and has been entirely free from pain.

Neither at the operation nor in the after-treatment were any of the "antiseptic" methods of Prof. Lister employed.

The fistula in the gall-bladder continued to discharge clear mucus till on August 5, when "something seemed to give way," as she said, and bile flowed freely. This shows that the occlusion of the duct had been overcome, and the complete functions of the organ may be re-established by the closure of the fistula.

The second case was that of A. B., aged 37, who was placed under his care some weeks ago by his colleague Dr. Hickinbotham. A tumor in the position of the gall-bladder could be occasionally discovered, and she suffered intermittently from severe attacks of colic. It was clearly a case of distended gall-bladder. On October 13, he performed an operation precisely similar to that narrated above, and removed sixteen gall-stones, varying from seven grains to thirty-five in weight. He removed the drainage-tube on the third day. The stitches are now (October 24) all removed, and the wound is almost healed.—*British Medical Journal*, November 18, 1881.

DEMONSTRATION OF THE BACILLUS TUBERCULOSIS IN SPUTA.—DR. HLAVA recommends the following method as especially applicable to the detection of bacilli in tuberculous sputa: Fifty grammes of fuchsin or methyl-violet solution are poured into two hundred grammes of alcohol, and allowed to stand twenty-four hours, and then filtered. A saturated solution of oil of cloves is then prepared, which must remain cloudy and of a dirty yellow color; it is then filtered, and a few drops of the fuchsin solution added, so as to form an opalescent solution. The sections are allowed to remain in this solution for thirty minutes, and decolorized by a mixture of nitric acid and water, 1 to 5; they are then washed in water or alcohol, cleared with oil of cloves or glycerine, and mounted in Canada balsam or glycerine cement. Sputa are prepared as directed by Koch, and stained as above, with the exception that a mixture of equal parts of nitric acid and water is required to remove the excess of color. The bacilli are by this process stained either red, violet, or blue.—*All. Wiener Med. Zeit.*, Oct. 31, 1882.

CRUOP AND DIPHTHERIA.—PROF. E. HENOCH draws attention, by means of a paper published in the *Berliner klinische Wochenschrift* of Oct. 2d last, to the difference which, according to his view, exists between the non-specific croupous angina and true diphtheria, diseases which he believes are not sufficiently discriminated. At the outset he expresses his conviction that there is such a thing as a non-specific croupous pharyngitis, and he regards croup as only being identical with diphtheria, whether in its pathological or other relations, in the same way as a smallpox pustule resembles a pustule produced by vaccinia or as the result of the inunction of tartar emetic. Any so-called croup having a specific origin is, he alleges, diphtheritic. With a view to the better distinction of the two diseases, he points out that the non-specific croupous pharyngitis is generally characterized by the suddenness of the febrile invasion, whereas in diphtheria the fever is at the onset only slight and insidious in its progress. A much less constant difference lies in the fact that in the non-specific disease a single tonsil is, in the first instance, much more frequently affected than is the case in diphtheria. So also the extension of the membrane to the palate, and especially to the back of the pharynx, must always be regarded as highly indicative of true diphtheria, and the implication of the mucous membrane of the nasal passages is a certain sign of that specific disease. On the other hand, certain indications to which importance is at times attached are, according to Prof. Henoch, comparatively unimportant. Thus albuminuria, generally regarded as a symptom of diphtheria, is often absent in undoubted cases of that disease, and micrococci, when discovered by the aid of the microscope, are of little value for the purposes of diagnosis, not only because they are found everywhere in the mucous membrane about the pharynx, but because no definite microphyle has been shown to be associated with diphtheria. The difficulty attaching to a correct diagnosis should, however, in the author's opinion, never interfere with measures of prevention, and hence he urges that where there is the least doubt as to which disease is being dealt with, isolation should be rigidly enforced.

Prof. Henoch proceeds to point out that the disease known as scarlatinal diphtheria is essentially distinct from specific diphtheria, and, according to his experience, the failure to distinguish between them is largely due to the fact that scarlatina and diphtheria are often treated in the same wards, and that patients whilst convalescing from the one contract the other. Cases are cited to show how patients recovering from scarlet fever associated with marked throat lesions

have contracted true diphtheria, and it is further shown that in patients who have undergone the operation of tracheotomy for diphtheritic croup, scarlatina with throat ulceration has subsequently intervened, the reception of the scarlet fever being greatly facilitated both in such an instance and in the case of convalescence after extensive diphtheritic throat lesions by the fact of the exposure of a wounded surface to that scarlatina poison. In such instances it is, however, suggested that a correct diagnosis will be aided if it be borne in mind that the throat ulcerations due to scarlatina follow on and do not precede the diphtheritic symptoms. In some of these instances the characteristic sequelæ of the two diseases have, in the later stage, been found mingling together in a manner which might easily be regarded as affording some proof of the unity of the disease, had it not been for the clear distinction between them which was possible at an earlier period of the patient's illness.—*Lancet*, Nov. 18, 1882.

THE TREATMENT OF SOME CHRONIC GASTRIC DISORDERS.—M. BROCA, in a series of articles (*Le Progrès Médical*, 39-42), strongly advocates, in ulcers of the stomach and chronic gastritis from various causes, the systematic washing out of the stomach and artificial feeding. In washing out the stomach there are two indications to fulfil—one, to empty it of its contents, whatever they may be; and the other, to treat the diseased mucous membrane with medicated solutions. He advocates the use of the siphon tube, on the ground that its manipulation is so easy that in a very short time the patient can learn to wash his stomach out himself. The washing over, the patient should be fed before the tube is withdrawn, powdered meat, raw eggs, milk, or broth being the most suitable food. He lays great stress on the advantages of over-feeding the patient, and mentions six hundred grammes of raw meat, a dozen eggs, and three litres of milk as a daily allowance that may easily be exceeded. It is always necessary to commence gradually, until it is ascertained that the patient can digest milk and eggs well. Should pain come on some hours after the meal, it is advisable to empty the stomach by means of the tube. The cure is permanent if the patients only take proper care of themselves afterwards. He thinks that this mode of treatment might with advantage be extended to other cases than purely stomach disorders; he suggests it, for instance, in advanced phthisis.—*Medical Times and Gazette*, November 18, 1882.

THE ACTION OF QUASSINE.—DR. COMPARDEN finds that quassine, the active principle of quassia amara, in moderate dose produces an increase in the salivary, hepatic, and renal secretions, and acts as a stimulant to the muscular fibre of organic life. In doses of 15 milligrammes to 15 centigrammes, it causes in man a burning pain in the oesophagus, headache, nausea, vertigo, dimness of vision, vomiting and diarrhoea, and cramps of the muscles of the leg. These symptoms are removed by chloral or chloroform.—*Bull. Gén. de Thér.*, November 15, 1882.

TREATMENT OF ENLARGED TONSILS.—When excision cannot be performed, DR. GORDON HOLMES mentions the following as a very effective method of applying the common caustics to the tonsil, which appears to have remained hitherto unnoticed. The tonsil, as the anatomist knows, is permeated by several rather large channels around which the follicles are collected, opening on the pharyngeal side of the gland, whence its characteristic, cribriform aspect. Their orifices, about seven to fifteen in number, are sufficiently evident to be counted on the healthy tonsil *in situ*, whilst

in the hypertrophied condition these lacunæ increase greatly in calibre and depth, and can be ascertained by a probe to vary from one-eighth of an inch to half an inch in length, with a diameter capable of admitting a style of ordinary size. These observations, then, afford a valuable indication for treatment: for through these natural canals a way lies open for us to attack the heart of the gland in a most efficacious manner with our caustics. Thin, pointed sticks of nitrate of silver or chloride of zinc can easily be pressed into the lacunæ and worked round for a few seconds. Small sloughs are thus formed, which are soon discharged, and in the progress of this treatment the tonsils are hollowed out in one direction whilst being contracted into much smaller bulk by the subsequent cicatrization in another. Two or three channels in each tonsil can be cauterized daily or on alternate days, and we can thus act on a comparatively large surface whilst causing but slight external soreness and little or no suffering to the patient. In practising this method, although the stronger caustics may be used, he does not think it will be necessary to have recourse to anything more potent than nitrate of silver, which acts much more effectually on the tender internal structures of the tonsil than when applied to the comparatively callous pharyngeal surface.—*Lancet*, November 11, 1882.

EXTRAPATION OF A CYST OF THE MESENTERY; RECOVERY.—WERTH (*Arch. f. Gynäk.*, xix., 2, 1882) reports the case of a patient who happened to notice an abdominal tumor during an attack of colic, three months previously. The tumor was of the size of a child's head, very movable. Soon after W. had examined the woman, the tumor became incarcerated in the pelvis, causing great pain, vomiting, and general prostration. Laparotomy. The tumor was imbedded between the two layers of the iliac mesentery, and was easily enucleated. Recovery. The contents of the cyst were of the consistency of thin gruel, not unlike a suspension of chalk in water. Microscopically nothing was found in the contents of the cyst but albuminous and fatty detritus. The wall of the cyst showed a distinct lamellar structure. W. failed to find epithelial cells, the predominant structural elements being those of the connective-tissue type. As to the nature of the tumor, W. thinks that it was a mesenteric gland transformed into a cyst.—*American Journal of Obstetrics*, December, 1882.

ETIOLOGY OF CROUPOUS PNEUMONIA.—GRIFFINI and CUMBRIA have been working at the question of the etiology of croupous pneumonia, and an abstract of the results of their investigations is given in the *Centralblatt für klinische Medizin*, No. 25. There is, they conclude, a bacillus in the blood and sputa of pneumonic patients, which is not the same as Klebs' *monadin*. When the pneumonic sputum, free from saliva, was subcutaneously injected, or placed in contact with the trachea of rabbits and dogs, a fatal form of septicæmia was induced, and the blood of these dead animals when inoculated into others led to a lethal result. The authors maintain that this is not a specific effect of pneumonic sputa, for some old experiments by Senator have shown that the inoculation of fresh bronchial mucus under the skin of a dog was followed by a deadly result. The saliva of pneumonic patients kills rabbits rapidly, but only gives rise to an abscess at the site of injection in dogs. Defibrinated blood from cases of pneumonia, thrown into the cavity of the peritoneum or of the trachea of rabbits and dogs, resulted not in pneumonia, but in various degrees of fever. Inoculations of the bacilli in various stages of artificial cultivation never caused any changes in organs, but only alterations in temper-

ature. The bacillus of the pneumonic blood and sputa was always afterwards found in the blood of the vaccinated animals, although it had excited no pneumonia; hence, the authors believe that the bacillus found in the patients suffering from pneumonia was an epiphemonon, and not a necessary factor in the production of pneumonia. When small doses of ammonia were syringed into the trachea of animals, lobar pneumonia was invariably produced if the animals survived a few days. The authors come to the conclusion that pneumonia is not an infectious disease.—*Medical Times and Gazette*, November 25, 1882.

COLOR-BLINDNESS.—DR. KOLBE, one of the several Russian physicians who have been engaged in a series of important researches in connection with color-blindness, has published the results in *Vratch*. Out of 10,828 railway servants examined, no fewer than 251 were color-blind, and 32 proved to have an imperfect capacity for distinguishing colors. The average percentage of color-blind would thus be 2.6; but the five doctors who have made these investigations arrived at very different percentages, namely, from 0.85 to 5 per cent. Three other doctors have made experiments on sailors and pupils in naval schools, and have found a much higher percentage—6.08 per cent. of color-blind, and 8.5 with imperfect vision. Among scholars of naval schools, the percentage of color-blind is, however, smaller—that is, 1.6 and 1.95. Women are subject to a far smaller extent to color-blindness. Thus, Dr. Kolbe, who has experimented both on men and women, discovered among the men 2.5 per cent. of color-blind, and 7.5 with imperfect vision; whilst among women, he has discovered only 0.16 per cent. of color-blind, and 3 per cent. with imperfect color-vision.—*British Medical Journal*, November 18, 1881.

THE VALUE OF ANOMALOUS RESPIRATORY MOVEMENTS IN THE EARLY DIAGNOSIS OF PULMONARY TUBERCULOSIS.—DR. GRANCHER shows that more value than has heretofore been believed can be attached to the presence of anomalous respiratory movements in the early diagnosis of tuberculosis of the lungs; and, when the irregularity is localized in the apex of the lung, particularly on the left side, and is permanent, it permits of a positive diagnosis, even in the absence of other signs, such as crackling or alterations in vocal fremitus or pulmonary resonance. These respiratory anomalies, in the order of their importance, are rough and deep inspiratory murmur, feeble and jerky respiratory movements; the harsh and deep-toned inspiratory murmur is the most valuable sign, as it is the earliest which appears.—*L'Union Médicale*, November 21, 1882.

MODIFICATION OF SALIVARY SÉCRÉTION BY EXCITATION OF THE SIGMOID GYRUS.—M. BOCHÉFONTAINE has observed that violent excitation of certain regions of the cerebral cortex is followed by a condition of complete inexcitability. The passage then of a galvanic current through a point of the sigmoid gyrus, whose stimulation was previously followed by a secretion of saliva, is then inefficacious; but this same current when passed through a point in the immediate neighborhood, then causes a flow of saliva and this point in its turn becomes inexcitable. M. Bochefontaine proposes the following explanation: denying the excitability of the gray matter, he attributes the phenomena to stimulation of the white peduncular fibres; when these fibres are excessively stimulated at any point of their path, they become inert through a small extent, but preserve their excitability through the remainder of their path.—*Le Progrès Médical*, November 18, 1882.

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SATURDAY, DECEMBER 23, 1882.

EMBARRAS GASTRIQUE.

IN presenting the compliments of the season to our readers, it is our hope that this issue may reach them in the full enjoyment of the pleasures of this festal time.

As a subject connected with the medical aspects of Christmas-tide, we beg to offer some observations on a malady often produced by its festivities.

Embarras gastrique is an eminently apt designation, for which we have no suitable or exact English equivalent. This malady is not less, but more common, in this country than in Europe. Americans habitually indulge more freely in the pleasures of the table than foreigners, because of the high price of labor and the cheapness and variety of our native foods. Especially at the holiday season are attacks of acute gastric catarrh common. The unrestricted indulgence in sweets allowed to children at this season, the unwonted imbibition of alcoholic fluids of all kinds by adults, and the general consumption of rich articles of diet by all classes and every age, necessarily greatly embarrass the stomach. It would, however, be taking a very narrow view of the subject to limit the pathological mischief to the mere stomachal disturbance. Although perfectly well known, it is doubtful whether there is an adequate conception of the important reflex relations of the stomach entertained by physicians in general.

Besides the mere stomachal derangements characteristic of *embarras gastrique*, there are varied and important reflex disturbances. It is a well-known fact that attacks of acute alcoholic delirium, and *delirium tremens*, are far more common at and

immediately after the Christmas holidays than at any other period. Convulsions, attacks of laryngismus stridulus, ulceration of the tonsils, are reflex effects observed in children under the same conditions. Cerebral hemorrhages and epileptiform seizures are amongst the more uncommon reflex accidents thus induced; whilst vertigo and hebetude of mind belong to the usual and ordinary reflex effects of *embarras gastrique*. We should not overlook the agency of stomachal derangements of an acute kind in the production of pneumonia. If we refer to the anatomical relations of the vagus, and the results of its division in animals, we can hardly doubt the effects which may follow irritation of its end organs in the stomach. The depressing effect of persistent irritation of these terminals on the nucleus of the nerve, we do not doubt, may be the needed factor to determine an attack of pneumonia when the other conditions are present. Amongst the most frequent of these reflex effects, are certain cardiac troubles. There are also mechanical effects of no small importance. Irregular action, and more or less violent palpitation, in adults, intermission of the pulse in children, are obvious reflex cardiac symptoms. Gaseous accumulation, and the consequent upward pressure of the stomach against the diaphragm, mechanically impede the play of the heart. These effects, although distressing, and often alarming, are not dangerous to life, in the normal state of the organ, but when a fatty condition of the cardiac muscle exists, and in some cases of adherent pericardium with the resulting myocarditis, in those mysterious instances of cardiac neuralgia with changes in the motor ganglia, etc., these functional disturbances assume a high degree of pathogenetic importance.

The least attentive consideration of the foregoing facts, must convince any one that *embarras gastrique* is not a trivial disorder.

The catarrhal condition of the mucous membrane is rarely, if ever, limited to the stomach. The mucous membrane of the duodenum, is implicated to a less or greater extent, and by no means infrequently, some catarrhal swelling of the orifice of the common bile-duct, and of that conduit itself, takes place. The influence of this condition in the symptomatology of the malady under consideration will be made evident, hereafter.

The symptoms by which *embarras gastrique* is recognized, are, a rather heavy or foul breath; a coated, sometimes heavily-coated, tongue; a yellowish and suffused conjunctiva; a muddy, almost jaundiced complexion; headache, dizziness, and confusion of mind; nausea, often vomiting which becomes bilious after a time; stomach pain; constipation, sometimes diarrhoea, etc. In children there may be feverishness, and in adults fever, or a

slow pulse indicating cerebral oppression. Very often, the offending substance may be recognized in the eructations, or merely in the consciousness of the patient. Lastly in some persons, especially in the case of habitual sufferers, an attack of this malady always takes the form of sick headache.

If we have not overrated the importance of *embarras gastrique* the treatment of this condition deserves careful consideration, particularly at this season when we are likely to see so many examples of the affection. The mildest cases may, it is true, need only evacuation of the stomach, but those in which the catarrhal process has invaded the duodenum, require more elaborate management. A careful regulation of the diet, including almost total abstinence for the first day or two, the stomach having been thoroughly emptied by suitable means, and the administration of a mild saline, such as a Seidlitz powder, may be the only measures necessary. The most obvious reason for thorough evacuation of the stomach, is the irritation caused by the fermentation of certain constituents of the foods. The saccharine and fatty elements, especially, undergo the acetic, lactic, and butyric fermentations, resulting in the formation of highly irritating acids. Hence it is, when the contents of the stomach come up, they are intensely acid and offensive. When acid is so much in excess, there is enough not only to neutralize the alkaline juices of the duodenum, but to give an acid, rather than an alkaline, reaction to them. After the stomach is emptied and the intestinal canal moved by a saline, an anti-ferment—if the derangement continue—renders an incontestable service. Under such circumstances, a combination of carbolic acid, or creosote with bismuth, is highly useful. An alkali, given to neutralize the acid, merely palliates, by removing the acidity for the time being, but rather favors than retards subsequent acid fermentations.

An important point in this connection is the administration of mercurials. When the conjunctiva is yellow, the complexion muddy, and the tongue has a yellowish coating, especially if there be a jaundiced hue of the skin, mercurials are supposed to be indicated. It is particularly desirable to have correct views in respect to this condition of things. Rutherford's experiments on dogs, as all the world knows, have demonstrated that calomel does not increase the hepatic secretion. Dogs are generally considered poor substitutes for men, but there happens to be entirely confirmatory evidence in the case of Westphalen's patient with a biliary fistula, on whom calomel rather decreased the flow of bile. If calomel had a stimulant effect on the liver, it would be contraindicated in these cases. It is undeniably useful, on the other hand, and because it has sedative effects. In the cases of *embarras gas-*

trique small doses of calomel—one-half to one-sixth grain—will allay the irritability of the stomach, and act efficiently as a purgative. The change in the character of the evacuations produced by mercurials, not due to alterations in the hepatic secretions, are too complicated to be discussed here. Whilst we may admit the fact of the change, and the utility of the treatment, we must reserve our judgment in regard to the precise nature of the process. If relief is procurable by less doubtful means than the administration of mercurials, there can be no question about the propriety, indeed the duty, of employing such measures.

WANTED—A NEW ANATOMY ACT.

THE recent deplorable developments in reference to the supply of anatomical material by illegal methods, which have been followed by such swift punishment, have called attention to the exceedingly unsatisfactory condition of the law of 1867, commonly called "the Anatomy Act," for the distribution of unclaimed dead bodies. This Act provides that public officers shall deliver for dissection the bodies of deceased persons required to be buried at the public expense, said bodies to be distributed among the schools equitably in proportion to the number of their students. We take occasion, therefore, to suggest that a new Anatomy Act should be passed during the coming session of the Legislature, and to point out the alterations which seem necessary for the efficient working of such an Act. Other States may well profit by the experience of our own.

1. The present Act applies only to the counties of Alleghany and Philadelphia. Practically the Philadelphia schools have to depend on the supply derived from Philadelphia County only—a restriction both unreasonable and noxious, as the late events prove. That it is unreasonable, any one will admit, when it is considered that physicians from all parts of the State are educated at Philadelphia. During the last session at the University and Jefferson College alone, there were 547 students from Pennsylvania, the vast majority of whom came from other counties of the State than Philadelphia, and yet only the unclaimed dead of Philadelphia County are legally made available for their instruction. The new Act should make the unclaimed dead in the *whole State* available for dissection.

It may be asked whether there exists any need for an Act so wide in its application. Let the figures answer. We would scarcely let any one meddle with our watch who had but twice dissected one. It will, then, hardly be thought unreasonable that the student shall dissect and perform operations upon the human body *once* during each of the two years devoted to the study of anatomy. This would require each winter one subject to every two stu-

dents in the anatomy and operative surgery classes. Taking no account, then, of those students who would desire to do *more* than this, let us see what should be the very smallest number of subjects necessary for their reasonably thorough medical education.

During the session of 1881-82 there were in the dissecting and operative surgery classes in Philadelphia 1493 students, who under this estimate would require 746 subjects, to which number must be added about 50 for lectures and demonstrations by the professors, that is, 796 subjects. This, be it understood, is the number of subjects *required*. The number actually *used*, as we have the best reason to believe, is but little beyond one-half this estimate. The resulting restriction of the anatomical and surgical opportunities of students is no less serious than it is lamentable.

The number of subjects received from the Almshouse during that session was 302—about 40 or 50 more than the average number. To this may be added, say 93 from the Coroner, and about 10 from the prison, the House of Correction, etc., making about 405 subjects. If 796 subjects are requisite and only 405 are to be had from proper sources of supply in this County, is it not reasonable to ask that other counties assist in the medical education of their own students who come to Philadelphia, to say nothing of the students from other States. Such a statement of the utter inadequacy of the supply emphasizes also the need for an equitable distribution of the bodies legally available, not only from the Almshouse, but from all other sources.

One thing more should be said—that in spite of the great difficulty the medical schools of this city have had, in common with those in all parts of the country, in supplying the increasing number of students with anatomical material, desecration of graveyards has been exceedingly uncommon. Since 1867 when the Anatomy Act was passed, until the recent spoliations began, we have good reason to believe that rarely, if ever, have any bodies been supplied illegally.

2. The present Act says that the unclaimed dead are to be distributed among the schools *pro rata*, but no well-defined machinery is provided by law for such a purpose. The anatomists have voluntarily agreed upon a fair distribution by an Anatomical Committee, to whom stated returns are made by each school. The Board of Guardians of the Poor have availed themselves gladly of this solution of the problem, but the Coroner, though for some months in 1880-81 he acquiesced in the same plan, no longer does so, and now claims that the Act does not require him to distribute the unclaimed bodies that come under his cognizance. Indeed he states that, in accordance with his view of the law, it is his duty

to have them buried, and that after he has given the certificate of death his control over them ceases. This view we cannot accept, since the law expressly devotes those bodies “required to be buried at the public expense,” to the medical schools “for the advancement of medical science,” and directs that “any public officer having control over them shall give permission to any physician or surgeon to take them, preference being given to medical schools, public and private.” The new Act should prescribe a fair method of distribution, similar, perhaps, to that already in existence, and make it obligatory upon public officers to submit to it.

3. The present Act provides a penalty for trafficking in bodies, but omits any penalty for non-compliance with its provisions. To urge the insertion of such a penalty would be a work of supererogation.

Had the above remarks only to do with the pleasure of doctors in scientific studies it would be even then of no little moment. But it is the terrible results that must ensue to the community from imperfectly educated medical men, unless something radical and efficient be done, that make it of vital importance. The whole community is interested that its advisers at birth, sickness, and death be as skilful as possible. To be such they must know first of all the anatomy of the human body.

We hope, therefore, that immediate steps may be taken looking to prompt legislative action.

MENTAL CULTURE AND LONGEVITY.

SIR THOMAS WATSON's career affords a signal illustration of the influence of mental culture on longevity. Notwithstanding he passed a life of incessant labor, he continued with unimpaired intellect much beyond the ordinary period of human existence. The late Dr. Jacob Bigelow, of Boston, who attained the advanced age of ninety-four, is another instance. A most interesting account of an interview with Dr. Bigelow, a short time before his death, was published by Dr. Bowditch, of Boston, in the *Boston Medical and Surgical Journal*, in which we learn that the aged Doctor had not lost that acuteness of intellect which had distinguished him during the most active period of his life. Sir Thomas Watson seems to have preserved his powers until a short time before, if not until quite up to, his last moments. There are many other examples of the combination of longevity with a high order of professional and intellectual activity, of course; but few instances of such conspicuously high mental activity, conjoined to such extreme longevity. We dwell on this aspect of Sir Thomas Watson's career the more especially to impress on our readers the beneficial effect on the bodily functions of active exercise of the mental powers. We hear much in these days of the deleterious effect of unremitting

mental toil; but what shall be said of the career of the eminent professional men who have outlived, as they outworked, the most of their contemporaries?

In the case of Watson, it was not alone education, culture, and vigor of constitution which advanced him to the highest rank in the confidence and esteem of the English people. He conjoined to an admirable *suaviter in modo* a most refined *fortiter in re*. He was, at the same time, a pleasant and cordial gentleman, and a resolute and uncompromising opponent of all mean and base practices of every kind.

DERMATOLOGICAL.

We have constantly to lament the unkind spirit in which medical journalists refer to the work of their colleagues. It has not often fallen to our lot to record a more signal instance of this than the comments of the *Michigan Medical News* on the opinions of Dr. L. P. Yandell, Jr., in respect to the pathogenetic relations of cutaneous diseases. Dr. Yandell is one of the editors of the *Louisville Medical News*, and, also, a professor in the University. He may, therefore, be supposed to know something of the subject in regard to which he gives an opinion. The *Michigan Medical News*, actuated by that iconoclastic spirit, unhappily too much in vogue in our time, criticises these utterances of Dr. Yandell, and the latter appeals to his colleagues of the press for justice. We are deeply impressed with the magnitude of our responsibilities under these circumstances. When doctors differ, who shall decide? is the old adage. We will not presume to decide, but will submit the important questions at issue to the tribunal of medical public opinion. The Michigan paper, as quoted by Dr. Yandell in his circular, says:

"Dr. Yandell attributes all skin eruptions to malaria. Quinia is a specific for malaria; *ergo*, quinia is the remedy for all skin symptoms."

Such is the allegation. Dr. Yandell hopes that his *confrères* of the press will give publicity to his correction of the misunderstanding into which his Michigan brother has fallen. We make haste to do so. Dr. Yandell's new statement is as follows:

"Malaria is the *chief source* of acute skin disease. Scrofula is the *chief source* of chronic skin disease."

In explanation, Dr. Yandell says: "I do not claim that malaria and struma are the *sole* causes of the dermatoses. Indeed, many of the dermatoses may exist *independently* of malaria or struma."

After such a luminous exposition of his views, it is surprising that any journal should attempt to discredit his theory. If malaria and struma are, and are not, the chief pathogenetic factors of skin disease, what more can be said? In our opinion, Dr.

Lunsford P. Yandell has made his point good, and has so entirely settled the question of the etiology of skin diseases that all doubters must retire from the field in confusion.

DR. BEARD ON MIND-READING.

We find in the issue of the *New York Tribune* for Wednesday, December 13, an account of mind- and muscle-reading experiments, conducted in Dr. Beard's office. A pale, delicate boy of fifteen is the subject of experiment. Dr. Beard makes some passes, and straightway the youth goes off into the somnambulistic state. Then the mind of the operator being fixed on some particular object—a piece of paper, a pin, etc.—the youth flies about the apartment, leading his experimenter by the hand, until the object is found. Sometimes there is a failure, because the operator does not fix his mind on the object sufficiently powerfully, etc. Whilst we do not pretend to doubt Dr. Beard's sincerity, or his scientific zeal, we must protest against such exhibitions being received as of medical authority. Besides the obvious dangers of deception and fraud, there are no new facts developed by such experiments. To conduct them before newspaper reporters, and a gaping multitude of *quid nuncs*, is to lower them to the level of those performances carried on by peripatetic mesmerizers, and are, therefore, as we conceive, unworthy the attention of a truly scientific expert. We observe with regret that Dr. Beard lends himself to such questionable practices. If he wishes to so occupy himself, he ought at least divest them of any supposed medical professional character.

IN another column we publish a letter from Dr. C. R. Agnew, which, it may be presumed, is an authoritative statement of the sum and substance of the arguments advanced in defence of the new Code. From time to time these "arguments" have been fully refuted in our columns, and it seems useless to seriously consider them again. Moreover, we cannot think that any number of our profession can agree with Dr. Agnew in believing that, because the legislature of New York passes a law declaring that any one possessing a diploma from an incorporated medical school, or a license to practise, is "a legally qualified practitioner," therefore we should be so forgetful of our standard of professional requirements as to go still further, and declare that we shall receive him as one of us, and thereby recommend him to the public as worthy of their confidence and support.

By some occult process of reasoning Dr. Agnew connects the new Code of his State with the benevolent workings of the laws to regulate the practice of medicine in other States, and apparently forgets

that the old Code alone is recognized by the profession in those "twenty States and Territories," including Illinois, in which these good results have been obtained. Indeed in New York the adoption of the new Code has had no effect on the prosecution of illegal practitioners, which was just as active last year under the old Code, as it is now.

The fact is no Code of Ethics has had or ever can have any legal force, and the only good ever to be obtained by a Code is in the establishment of a recognized standard of professional morals. To ask the profession to affiliate with every man whom the State recognizes as authorized to practise medicine, is to ask the profession to yield up everything which has made it honorable since "the time whereof the memory of man runneth not to the contrary."

REVIEWS.

THE PHYSICIAN'S VISITING LIST FOR 1883. Philadelphia: P. Blakiston, Son & Co.

THE PHYSICIAN'S MEMORANDUM BOOK. Arranged by JOEL A. MINER. Fifth and improved edition. Ann Arbor, Michigan.

THE PHYSICIAN'S VISITING LIST AND DIARY FOR 1883. Louisville, Kentucky: Geo. H. Dietz & Co.

WALSH'S PHYSICIANS' COMBINED CALL-BOOK AND TABLET. Seventh edition. RALPH WALSH, M.D., Washington, D.C.

The number and variety of the Visiting Lists now offered to the medical profession are so great as to constitute a veritable embarrassment of riches. Whilst they differ somewhat in arrangement they agree in design. In some of them, the matter of engagement making and recording is the controlling idea; in some it is accurate bookkeeping; in others, besides these objects, it is sought to impart a quantity of medical knowledge. As a general rule, these ready methods for treating diseases, are misleading. It would be extremely convenient, if the physician could carry in his coat pocket, formulated rules by which he could manage every case. Unfortunately more elaborate preparation is necessary, and hence the rules of the visiting list have little adaptability. We may make an exception in regard to the method of treating poisoning, and of resuscitating the asphyxiated.

Of the visiting lists now before us, the original model, that of P. Blakiston, Son & Co., is probably the best, and most of those in the market owe their inspiration to it. Walsh's Combined Call-book and Tablet presents some special conveniences, and is a good arrangement. It differs in respect to certain original conceptions more than any of them, from the model of them all. The Louisville Visiting List and Diary has many points of resemblance to Blakiston's, and hence is, probably, so much the better.

Miner's Physician's Memorandum Book is a rather complicated arrangement, but it may be adapted to any of the Physician's engagements or business. It is no doubt very complete, and must be useful in a high degree to those who require such a pocketbook.

Any of the "visiting lists" now offered to the profession must answer a useful purpose, and accomplish the purpose for which intended.

SOCIETY PROCEEDINGS.

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, Thursday evening, December 7, 1882.

VICE-PRESIDENT, T. M. DRYSDALE, M.D.,
IN THE CHAIR.

DR. T. M. DRYSDALE reported the following case of UTERINE MYO-FIBROMA.

An unmarried lady, 31 years old, of Trenton, N. J., consulted me January 18, 1879, as to the advisability of an operation for the removal of an abdominal tumor. On examination it proved to be a uterine fibroid, hard, smooth-walled, and moderately movable. It filled the lower part of the abdomen and extended upwards to about an inch above the umbilicus. A peculiar feature in the case was the presence in the lower part of the tumor of a large vessel with an aneurismal thrill, which could be felt through the upper part of the left side of the vagina. As her general health was good, the tumor producing no inconvenience except by its size, and the menses regular in every respect, I advised against an operation and directed her to take chloride of ammonium in ten-grain doses three times a day, and, at her menstrual period, 30-drop doses of the fluid extract of ergot at the same intervals.

She continued this treatment for two years, the tumor in the meanwhile slowly increasing in size. At the end of this time, finding no diminution in the size of the growth, and becoming discouraged, she abandoned all medicines. The tumor continued to grow steadily, but became much softer in its upper portion. An examination made, December 9, 1881, showed the tumor growing in all directions. It now projected into the pelvis behind the uterus, filling this part with a hard, nodulated mass; while above, as has been stated, it continued to soften as it ascended, giving it the feel of a cystic growth.

From this time it continued to grow rapidly, and by July, 1882, it was pressing against the liver and filling the whole abdomen, except the epigastric and left hypochondriac regions. Her general health was seriously impaired, and she had emaciated considerably. On examination I found the uterus displaced towards the right side: the sound entered five and one-quarter inches in the same direction. When in the uterus the sound did not follow closely the motions given to the tumor, while the tumor itself was found to be more fixed. The aneurismal vessel had enlarged considerably, and the thrill was much stronger.

Although I had dwelt upon and fully acquainted her with all the dangers of such an operation, yet she was very anxious to have the tumor removed, and as delay increased the danger, I proposed an exploratory operation with the understanding that if the tumor could not be taken away with ordinary safety, it should be left undisturbed, but in that case, if possible, the uterine appendages should be removed and the arteries in the broad ligaments tied.

The operation was performed November 2, 1882, in which I was assisted by Drs. W. P. Buck, W. S. Stewart, L. Harlow, of this city; Dr. I. Shellenberger, of Germantown; Dr. I. Eshelman, of San Francisco, and my son. An incision was made through the abdominal wall, midway between the umbilicus and pubis, of about three inches in length, down to the peritoneum, which was cautiously opened exposing a dark-red tumor with a rough surface. The structure of the tumor was soft, and it appeared highly vascular. Fearing to tear it, I passed my hand with extreme caution between it and the abdominal wall down towards the usual loca-

tion of the ovaries, but could not reach them. Great difficulty was experienced in doing this, owing mainly to the rigidity of the abdominal walls, which kept them in close apposition to the tumor, and it required the exertion of considerable force to separate them. While thus attempting to reach the ovaries I unfortunately tore a small opening in the upper surface of the tumor from which the blood flowed freely. It was found that this bleeding could only be controlled by pressure, for the structure of the growth resembled a sponge, and was so soft and easily torn that a ligature was worse than useless, as it would cut through the loose tissue leaving a larger bleeding surface. It being impossible then to arrest the bleeding by any other means than pressure, I was compelled to continue the operation for the removal of the tumor. To do this the incision was extended to three inches above the umbilicus, and downwards nearly to the pubis. The tumor was attached above and behind to the mesentery, while beneath it was adherent to the broad ligaments and ovaries which laid under it; these bodies having been displaced to such an extent downwards and backwards as to be completely out of reach until the tumor was raised. The pelvic portion was strongly adherent to the surrounding parts. The mass was removed from the abdomen with considerable difficulty, but when this was accomplished it was seen to spring directly from the fundus of the uterus by a broad pedicle. A large clamp was applied to this and the tumor cut away. The adhesions were soft and brittle, and tore readily, leaving a rough, coarsely granular, or spongy surface, and from every adherent point poured out blood. The main bleeding was from the adhesions around the brim of the pelvis and to the broad ligaments. The tissues about these adhesions were ragged, and the vessels difficult to secure, but I succeeded in arresting the hemorrhage. On raising the intestines, which had been thrust out by the contraction of the abdominal muscles, the torn mesenteric attachment was found to be bleeding freely. This surface required a great number of ligatures.

Immediately upon the withdrawal of the tumor from the abdomen, the patient became pulseless, the skin pale and moist, and in fact all the signs of intense shock presented themselves. This was before any serious hemorrhage had occurred. The active bleeding which immediately succeeded prevented any attempt at reaction, and although heat was applied, brandy given freely by the mouth as long as she could swallow, and hypodermic injections of brandy and morphia used, she sank and died just one hour after clamping the tumor.

This case is of great practical interest in view of the strenuous advocacy by many recent writers of the operation for the removal of the uterine appendages, as a comparatively safe method of arresting the growth of uterine fibroids. It proves that in these large fibromas such an operation is not only hazardous, but may be extremely difficult, and that, in fact, we cannot even be certain that we can reach these appendages, for in this case, so completely buried beneath the tumor were the ovaries and ligaments that neither could be found until it was raised from its bed, when they were discovered adhering to its lower portion. In an operation which I performed last winter the same difficulties were experienced: the ovaries could not be reached until the tumor, which was extremely large, weighing nearly a hundred pounds, was raised out of the abdomen. These, added to many other cases which I have met with, show that in large uterine tumors the removal of the uterine appendages may prove quite as dangerous as the extirpation of the growth itself, and be utterly impracticable unless the tumor is turned out from the abdomen. Now if this should have to be

done in order to reach these bodies, which would of course necessitate the detachment of adhesions and risk a shock by the disturbance caused by raising the mass, it would undoubtedly be better practice to leave the uterine appendages untouched and remove the tumor itself.

This case teaches another practical fact, which I have not found alluded to by writers on this subject, that when we meet with the soft variety of these growths, the certainty of hemorrhage difficult to control is added to the other risks of the operation, and if the character of the tumor is recognized in time, and the presence of extensive adhesions determined, the safest plan for the operator to follow is to leave the tumor untouched, and close the wound.

DR. B. F. BAER (in response to a call from the Chair) inquired of Dr. Drysdale the effects of ammonium chloride and ergot as administered by him in this class of cases. Does not ergot, when given during the menstrual flow, increase the quantity of the discharge? Does ammonium chloride have any effect in reducing the size of the tumor? He had used ammonium chloride a great deal; in fact, he gives it in every case of uterine fibroid that comes under his care, but he has not seen or expected much from its employment. He considers it an alterative; it makes the patient feel better, but he has not seen any reduction in the size of the tumor follow its use: it relieves the painful flushings connected with the existence of a uterine fibroid or the menopause. He is not very sanguine as to the effects of ergot used in any way, hypodermically or otherwise, to reduce the size of a uterine tumor, and it certainly can effect nothing in the case of a pedicellated sub-peritoneal uterine fibroid.

As regards the hazard of the operation under the conditions existing in the case narrated by Dr. Drysdale, it cannot be too strongly expressed; but there have been instances of recovery under conditions apparently as desperate as those just detailed. The case referred to by Dr. Harris (chairman *pro tem.*) was operated upon by Dr. Goodell. The patient was a lady of middle age, who had been suffering from profuse hemorrhage which was endangering her life. This hemorrhage was the result of the existence of a large uterine tumor, and Dr. Goodell decided to attempt oophorectomy as a means for her relief. An incision three or four inches in length was made in the middle line of the abdomen. The large size of the tumor made it very difficult to reach the ovaries. One was, however, reached and successfully ligated and removed without causing hemorrhage, although the pampiniform plexus was very much enlarged. It was necessary, in order to reach the other ovary, to enlarge the abdominal incision and roll the tumor over. It was found and removed, but a large plexus of veins was ruptured in the turning, and the hemorrhage was frightful—the blood escaping from both ends of the vessels; ligatures were passed through the substance of the tumor and finally succeeded in stopping the loss of blood. The Doctor thought he might be compelled to remove the entire uterus to stop the hemorrhage. This had happened to Knowsley Thornton.

This patient recovered, but Dr. Baer had seen death from peritonitis result in similar cases from the exploratory incision alone, the tumor and ovaries being found to be in so vascular a condition that Dr. Goodell was afraid to complete the operation.

DR. HARRIS remarked that he was present at this operation and was a close observer. The veins were ruptured during the turning of the tumor; there was a peculiar anastomosis of the large venous trunks at the point of rupture. In this case the tumor had formed no adhesions.

Dr. Harris had been present at an operation by Dr.

W. W. Keen in a similar case. The tumor was smaller but the hemorrhages had been so profuse before the operation as to leave the patient wan in appearance. In this case the tubes were tied close to the uterus and were removed with the ovaries.

DR. BAER remarked that Dr. Goodell had been very successful in operating by removing the ovaries for the cure of metrorrhagia the consequence of uterine fibroids.

DR. GITHENS, in answer to the first query by Dr. Baer, remarked that although not successful in relieving menorrhagia by the internal use of ergot, he had had very satisfactory results from the use of ergotin suppositories in cases in which there was no tumor present.

DR. A. G. B. HINKLE alluded to several cases in which he had used ergot for the relief of menorrhagia due to the presence of uterine fibroids; he had given it three days before the period, during, and for three days after its close; he also gave ammonium chloride in ten grain doses, three times a day, all the time. This treatment had produced undoubted effects, and in some cases the tumors had disappeared.

DR. HENRY BEATES had used ammonium chloride in the treatment of a lady who had a large uterine tumor. He continued it one year with marked effect. The menopause came on two years afterward, and the tumor has now entirely disappeared.

Dr. Beates made some general remarks about the microscopical appearance in hard and soft uterine tumors, and thought that the effect of ergot would depend upon the presence or absence of muscular fibres as a component part of the tumor.

DR. DRYSDALE, in closing the discussion, urged upon the members the desirability of limiting the operation of the removal of the uterine appendages for the cure of uterine fibroids to small tumors, or to those in the early stage and which have not commenced to undergo the softening process. He had noticed, in cases under his care, a small spot of softening begin in a previously hard tumor and progress until the change was complete. The tumor presented this evening had undergone this change, and had undoubtedly assumed a malignant type. Before the operation it felt as if it contained a fluid; since its removal it has shrunk to about one-half its original size from drainage of blood. From the description given during the debate, the tumor in the case of Dr. Goodell differed from the one presented this evening, in being much smaller and free from adhesions. The hemorrhage in his case came from a single laceration in the tumor, and could be controlled. In this case, not only did the torn substance of the tumor bleed, but every detached adhesion poured out blood in abundance.

In reply to Dr. Baer's questions, he would say that ammonium chloride in some cases of hard uterine tumors is remarkably efficacious in reducing the size of the growths; he has repeatedly seen them entirely removed by the remedy. He had never known ergot to increase the loss of blood during the menstrual period, when used for the cure of intra-mural tumors: ergot has a decided effect upon the nutrition of these growths, but he would not expect it to act upon pedicellated growths, unless inside the cavity of the uterus.

DR. HENRY BEATES had been called in consultation to see a case of metrorrhagia. Ten years previously the patient had suffered from miscarriage at the fourth month. Subsequently each menstrual period became more and more profuse and prolonged, until at the time Dr. B. first saw her the loss of blood was constant and the patient was pallid and reduced almost to a skeleton, her weight being but ninety pounds. The curette had been previously applied to the endometrium, with the effect of increasing the discharge.

Dr. Beates introduced a sound which passed to the left to a depth of five and a quarter inches; he introduced a laminaria tent of the largest size, and next day, by digital examination, discovered a sessile tumor; further dilation enabled him to remove the tumor by evulsion. It was necessary to divide it to deliver it through the os uteri. It was composed of fibrous and muscular tissue, and contained numerous dilated bloodvessels which had been the source of the hemorrhage before operation. Three years afterwards the patient's weight had increased to one hundred and fifty pounds.

DR. B. F. BAER read the following report of

A CASE OF LABOR WITH TWINS.

E. O., æt. 22, and single, entered Maternity Hospital on the morning of November 2, complaining of pains resembling those of the first stage of labor, although her gestation was computed to have reached only the beginning of the ninth month. These pains, she stated, began on the previous evening. Later in the day I saw her. Inspection of the abdomen showed it to be greatly distended and irregular in shape. By palpation I could readily outline, as I thought, more than one fetus, and by auscultation I very distinctly heard the heart-sounds of two children—one high up and to the right, the other below the umbilicus and to the left. Twin pregnancy was diagnosticated. Vaginal touch revealed the os uteri to be dilated to about the size of a silver half-dollar, the lower segment of the uterus and cervix to be rather elongated than rounded, as in a presentation of the vertex. After some time spent in deliberation a presentation of the feet was diagnosticated. The pains were not strong, and they had very little effect on the cervix. The patient was in a fair condition, though somewhat excited. Her lower extremities were edematous, her face a little puffy, and her urine contained a small quantity of albumen. The heart-sounds of the children were strong. I ordered fifteen grains of the hydrate of chloral and twenty grains of the bromide of potassium to be given at once. This dose was repeated once during the labor. Her bowels were moved by an enema.

Three hours afterwards the os was about double the size of that found at the first examination. The pains, still feebly acting on the presenting portion, had very little dilating power. As there was no special reason why the labor should be hurried, I waited two hours longer, at which time the feet were well down in the cavity of the pelvis, and projecting through the os, though the membranes were still unruptured. As the first stage of labor had now lasted twenty-four hours, and the patient was becoming tired, I felt that something more ought to be done to expedite the delivery; I therefore ruptured the membranes. One hour more was consumed before the feet reached the vulva. I now brought down the feet by extending the legs, and in a very short time after, without the least traction, the body followed as far as the shoulders, where it was arrested by extension of the arms. The arms were brought down as speedily as possible by carrying them forwards over the face. The child showed by its movements that it was still living, and the cord was feebly pulsating. The latter was relieved from pressure as much as possible. It was imperative that the head should be extracted speedily, or the child would die, but for some reason it would not descend. I at once recognized that the head was extended, with its long diameter in the conjugate of the superior strait, and that it was not yet fully freed from the grasp of the cervix, as the cause of the delay. I tried to flex the head and place it so that one of its antero-posterior diameters should correspond to the transverse of the superior strait, but could not, because, as I now recognized, the presenting portion of the second child was in the way. I could not reach high

enough to bring the proper force to ensure flexion of the head. I now very easily and quickly adjusted Simpson's forceps, when, by giving a slight oblique turn and carrying the handle of the instrument forwards, the head flexed and delivery followed almost immediately. Certainly, I think, not more than ten minutes elapsed from the time the body was expelled as far as the shoulders until the head was delivered. The child was alive but in an asthenic condition, and, although the usual efforts at resuscitation were applied, it died soon after.

Examination now revealed a presentation of the right shoulder of the second child, and that the presenting part was projecting through the superior strait. The membranes were unruptured. Version by the vertex was performed by the bimanual method, the uterus stimulated by friction and pressure on the fundus and the membranes ruptured. But the uterine contractions were very feeble, and it was some minutes before the head was secured from returning to its former position in the left iliac fossa, by having passed through the superior strait.

The uterus was now left to rest with the hope that it could spontaneously regain enough power to expel the remaining child; but after waiting nearly an hour, and finding that the head had advanced very little, a drachm of the fluid extract of ergot was administered *per orem*. This gradually spurred the uterus, and within thirty minutes afterwards the second child was born, or one hour and a half after the birth of the first. The uterus was so much exhausted that it was with difficulty made to contract by friction and pressure on the fundus, and it would relax again almost immediately afterwards. There was no evidence of separation of either placenta, in part or entire, because there was no hemorrhage. Therefore I concluded to let the organ rest for a time for the purpose of recuperation. I waited more than half an hour, of course not disregarding the liability to hemorrhage, open or concealed, and looking out for it. By this time the uterus was contracted pretty firmly around the placenta, which were attached in the neighborhood of the right cornu. I now tried again, very thoroughly, to express them by the Credé method, but failed. Traction on the cords seeming to indicate that the placenta were adherent, the only thing left to be done was the introduction of the hand. This I did with considerable difficulty. The uterus was firmly contracted at all points, except in the right upper portion, where it seemed to be paralyzed or prevented from contracting by the presence of the placenta. This gave to the organ the so-called hour-glass shape. The placenta were both adherent. I separated and withdrew them slowly, and held the emptied portion firmly by the external hand until contraction was secured. There was no further difficulty, and the patient left the hospital at the usual time.

I think the following points in the case of sufficient interest to warrant me in asking the Society's opinion on them :

1. The conduct of the first stage of labor. Ought I to have hurried it more, and thereby prevented exhaustion of the uterus? I think not. As it was, the os was not sufficiently dilated to allow the head to pass readily.

2. The delivery of the after-coming head. Placing the antero-posterior diameter of the child's head in the transverse diameter of the superior strait, and facilitating its passage, if necessary, by external pressure on the fundus of the uterus, the method so graphically described, and so earnestly and properly insisted upon by Prof. R. A. F. Penrose, as the proper plan of managing the head in ordinary breech presentations, was impracticable here, for the reason that the second child was in the way, both of placing the head trans-

verse and of external pressure. Manual or forceps action on the head was the only resort. That I did not at once apply the forceps I am sorry, for delivery three minutes earlier might have saved the life of the child.

3. The choice of ergot in preference to the forceps as a means of facilitating the delivery of the second child. The administration of ergot for the purpose of expediting the delivery of the child cannot be too strongly condemned, as a broad rule, but that there may be an occasional exception I think must be admitted, and also, that this was one. The os and other soft parts were dilated by the passage of the first child; the pelvis was sufficiently capacious, the presentation and position normal. There was, therefore, no obstruction to the rapid passage of the child were the power furnished by the action of the ergot. Moreover, that the uterus was worn out, and wanted time and stimulation to recover, was proven by the history of the labor, as related. There would have been great danger of hemorrhage had the forceps been used to rapidly empty the uterus.

4. Morbid adhesions of the placentæ, causing irregular contraction of the uterus, or contraction of the organ in every portion, except opposite the attachment of the placenta, where the contraction was not strong enough to separate them, giving the so-called hour-glass form to the uterus.

5. What influence had the ergot, if any, in inducing the irregular contraction? From my own experience, I would answer that I do not think it had any; first, because I almost always give ergot as soon as the child is expelled, and before delivery of the placenta; and, second, because I have never met with irregular contraction of the kind under discussion except in cases where the placenta was morbidly adherent.

The question, May ergot complicate the third stage of labor, by acting on the circular fibres of the uterus, at the internal os for instance, independently of the oblique and longitudinal fibres, incarcerating the placentæ thereby? I should like to hear discussed. I take a negative view.

6. The presentations were unusual. The first child usually presents by the head, the second by the breech or feet. In this case the first presented by the feet, the second by the shoulder.

They were both males, and weighed conjointly twelve and a half pounds. The first child was the smaller of the two. This is unusual.

DR. HARRIS had had under his care a woman in labor with twins. The first one delivered was a female weighing eight pounds; it presented by the breech. After it came away the os uteri and soft parts contracted, and an examination made by one who did not know of the delivery of the first child, would not have discovered evidence of the fact but for the presence of the child. The bag of waters presented, and the os uteri was again dilated. Three and a half hours after the birth of the first child the second, a male, was delivered by the assistance of forceps; its weight was nine pounds.

DR. HORACE WILLIAMS related his experience in a case of twins. The first child descended in the fourth position and no rotation occurred, as it was held so by the second child; the pelvis was roomy, but laceration of the perineum resulted.

DR. B. F. BAER also reported the following

CASE OF UTERUS SUBSEPTUS, COMPLICATING THE THIRD STAGE OF LABOR.

Through the kindness of my friend, Dr. T. Stanton Crowley, I was permitted, on Nov. 29, 1882, to see the interesting case which I here briefly describe.

Mrs. M. G., æt. 24, was delivered two hours before I

saw her of her fifth child, after a rather tedious labor, in which the breech presented. The placenta was delivered with some difficulty about half an hour after the expulsion of the child; but the membranes were retained by what was supposed to be an hour-glass contraction of the uterus, or contraction of the internal os.

I found the uterus well contracted, but somewhat irregular in shape, as felt through the hypogastrium. The internal os was contracted closely around a portion of the amniotic sac, which was projecting through it. I gradually passed one finger and then two through the os, and found that the membranes were pressed upon and retained by a firm substance, which obstructed the passage. After still further dilating, I tried to pass my hand, or as much of it as was necessary to reach the membranes, which I traced to the left cornu. In doing so my thumb was directed to the right, by the obstruction above mentioned, and passed into another cavity, independent, apparently, of the one in which my fingers were. The latter cavity was comparatively large and contained the membranes. My first impression was that I was grasping a fibroid tumor which had been flattened by pressure, or possibly a supplementary placenta, which was detached and lying edge-wise, but the result of further investigation proved that it was neither. I next removed the membranes—nearly the whole of the foetal sac—and then made a more thorough examination. Again passing my hand partially into the uterus, whilst with the external hand I made counter-pressure on the fundus, my fingers entered a comparatively large cavity towards the left. This was rough—placental site—and cylindrical in shape. My thumb, as before, passed to the right and into another cylindrical cavity, small, compared to the left, and smooth. Grasping the septum which separated my thumb and fingers, I found that there was a complete division of the uterine cavity into two unequal parts. The septum was wedge-shaped, with the blade of the wedge below, ending at the internal os, and, therefore, not dividing the cervical cavity. Externally the organ was not perfectly symmetrical and smooth, but at the point opposite the septum a slight depression was felt.

This is the *uterus subseptus unicollis* of Küssmaul, or a uterus which is divided in the cavity of the body only, the septum stopping short at the internal os, not dividing the cervical cavity therefore. The slight sulcus on the external surface makes it approach the form described by the same author as the *uterus bicornis subseptus unicollis*.

I now became interested in the history of the former gestations and labors of our patient, and learned that this was her fourth labor and fifth child.

The first was a twin-pregnancy, and terminated in premature labor in the seventh month. There was an interval of more than an hour between the birth of the first and second child, and another interval of fifteen minutes between the expulsion of the placentæ. And they did not have even a membranous connection. Did each cavity have its own independent ovum, therefore? Not necessarily, but it is highly probable, because, as a rule, the placentæ of twins have a membranous connection at least, and in those uncommon cases where they are entirely separate, may not each foetus have had its own independent chamber furnished by one of the forms of double uterus?

The second and third gestations went to term, but the labors were both complicated, requiring the aid of the forceps to supplement the imperfect expelling power of the uterus. We can readily understand why the uterine force was not applied to the best advantage on the foetal ellipse in a case of this kind.

The fourth and last labor was complicated in its third stage in a manner which is new to me.

May not some other of the complications of the third stage of labor be due to an undetected malformation of the uterus, resulting from arrested development? For instance, the perfect hour-glass shape which a few observers are sure they have met with. The uterus bicornis subseptus, a form of malformation where the horns diverge, and where a septum extends into the cavity, dividing it into two, furnishes a case in which the finger would encounter a point of constriction before it could enter the cavity containing the placenta; and externally the hand would detect the apparent constriction at the bifurcation of the cornua. But you will answer that bicornate uterus is very rare. So is perfect hour-glass contraction of the uterus; and the malformation of the uterus might not be so rare as supposed if it were detected in every instance where it exists.

"Busch mentions a case of uterus bicornis septus, in which an exhausting hemorrhage occurred, in consequence of the attachment of the placenta to the septum, which, not contracting, the vessels remained open." (Klob.)

This malformation may account for some of the cases of super-fetation, and menstruation during the early months of gestation. In this case the catamenia were absent during the whole of every gestation.

DR. R. G. CURTIN had this morning delivered a woman of twins; after the uterus was emptied and well-contracted, a strongly-marked sulcus could be felt in the fundus.

DR. DRYSDALE has under his care a woman whose uterus is divided by a complete septum.

DR. W. S. STEWART inquired if any previous examination indicated a want of symmetry, or if it resembled an extra-uterine pregnancy.

DR. BAER had not seen the patient until after the delivery of the child, and did not ask about the point mentioned by Dr. Stewart. Dr. Goodell has reported a case of supposed extra-uterine gestation in which labor came on naturally. This type of uterus may seem to be very rare because it is so difficult to recognize. The presence of the septum would never have been suspected in this case had it not been found in the attempt to remove the imprisoned placenta.

DR. HARRIS said that Dr. Goodell was uncertain of the character of the pregnancy, although every diagnostic test but one indicated that it was extra-uterine. This exceptional condition was the sensation of muscular contraction in the presumed cyst-wall when the hand was applied to the abdomen. Not being able to reconcile this action with the development of a tubal pregnancy, he determined to trust the case to nature, and sent the woman to the Preston Retreat, where she was delivered naturally in a few days. The uterus was double and was twisted on its axis, and the empty cornu was posterior, admitting the sound in the median line as into an empty organ.

PATHOLOGICAL SOCIETY OF PHILADELPHIA. Stated Meeting, November 23, 1882.

THE PRESIDENT, JAMES TYSON, M. D., IN THE CHAIR.

DILATATION AND ATEROMA OF THE PULMONARY ARTERY, WITH AN OPENING THROUGH THE INTERVENTRICULAR SEPTUM.

Presented by DR. BRUEN.

Examination of the Heart.—Left side: Slight ventricular hypertrophy; mitral valves somewhat thickened at the margins, with roughening of their auricular aspect; valves competent; the left auricle is normal, as is also the aorta and the aortic valves. Examination of the right side is of most interest. (1) Two of the semilunar leaflets at the mouth of the pulmonary artery are nearly destroyed by atheromatous changes; the third segment

is much thickened, and projects as a leaf-like fold, roughening the mouth of the pulmonary artery. This vessel is dilated to nearly twice its normal size, forming really an aneurismal dilatation. The vessel's walls are covered with a fringe of vegetations of inflammatory origin, or due to atheromatous changes. The right auricle is very small and imperfectly developed, the bulk of its cavity being formed by the auricular appendix. The tricuspid valves are much thickened, but are competent, probably. Between the two ventricles is an orifice large enough to admit the forefinger; it is directly beneath one of the tricuspid leaflets, and is lined with endocardium, and must have allowed a free interchange between the blood of the two ventricles. The walls of the right ventricle are thinned, and its cavity somewhat dilated. Dr. Bruen said that this case was interesting because perforation of the ventricular septum is often congenital and dependent on obstruction of the orifice of the pulmonary artery, the perforation being due to the pressure of blood within the replete right ventricle. This pressure causes an arrest in the development of the ventricular septum. The pathology of the present case probably is as given above, but there was no pulmonary artery obstruction. A similar case is recorded in the *Medico-Chir. Trans.*, vol. xv., by Fletcher. (2) There was no cyanosis—cyanosis is usually dependent on a deficiency of cardiac evolution, or else on retarded evolution of the pulmonary artery or aorta. As a consequence, there is deficient cardiac power to carry on the circulation; or the pulmonary artery or aorta is narrower than normal, so that in any of these conditions venous repletion results and cyanosis. (3) Mixture of venous and arterial blood is the not usual cause of cyanosis, although it may be a factor. Walsh says, "Grant that perforations of the ventricular septum coexist with constriction of the pulmonary orifice, and cyanosis seems to become a certainty." In our case there is an example of incomplete development of the ventricular septum, and deficient development of the right auricle, without cyanosis. Pulmonary artery disease is consistent with a fair amount of general health; compensation by the right heart may occur just as in cases of aortic disease. (4) Descriptions of pulmonary artery disease call attention to bronchitis, pneumonia, hydrothorax, as sequential states. In our case, no such complications were present until just before death, when she finally succumbed to congestion of the lungs, added to the cardiac state. (5) The aneurism of the pulmonary artery formed a pulsating tumor on the left side of the sternum, between the second and fourth ribs, extending outward from the border of the sternum, and including an area covered by a trade dollar. (6) Over the solid tumor a post-diastolic and presystolic bruit-like murmur could be heard at a point between the second and fourth ribs; while close to their junction with the sternum a hoarse, systolic murmur could be heard. The bruit was localized. The heart systolic murmur was carried on into the entire arterial system. Dr. Bruen then detailed at length the differential diagnosis of these murmurs. During life, dilatation of the pulmonary artery with abnormal obstruction had been the diagnosis. The patient was a woman, at 26 years, a syphilitic, and was under observation from November, 1878, to July, 1882.

DR. ESKRIDGE had not had any difficulty in differentiating a presystolic from a diastolic murmur. He thought the leathery thickening of the mitral valves in the specimen presented by Dr. Bruen was sufficient to give rise to a mitral presystolic murmur. If we adopt the theory of Dr. Austin Flint, Sr., that a mitral presystolic murmur may occur in aortic regurgitation, when the mitral valves are perfectly healthy, it seemed to him that there was no difficulty in accounting for the

presystolic murmur from the regurgitant blood from the pulmonary artery into the communicating right and left ventricles of this case, especially as thickening and loss of elasticity, with some rigidity of the mitral valves, existed.

DR. WILSON called attention to the evident relation between the incomplete ventricular septum and the condition of the pulmonary artery, which is greatly dilated and atheromatous and presents the appearances often met with in the aorta, very rarely in this vessel. The wall of the right heart is relatively thickened. This fact, together with the position of the opening in the interventricular wall which favors the flow of the blood from the left ventricle towards the pulmonary artery, renders it probable—almost certain—that the more forcible contraction of the left heart was constantly forcing a portion of its arterial blood into the right heart, thus increasing the current entering the pulmonary artery, and occasioning, first, hypertrophy of the right ventricle, and, second, a sub-acute inflammatory process in the pulmonary artery itself, in consequence of the increased volume and force of the blood-current. Dr. Shakespeare's observation that such growths as are here seen require for their existence arterial blood, is in accordance with this view.

SARCOMA OF THE PROSTATE GLAND,

Presented by DR. E. W. HUGHES.

The specimen which I have the pleasure of presenting to you this evening, was taken from a patient in the University Hospital under the care of DR. H. R. WHARTON.

W. E., aged thirty-five years, admitted to the University Hospital, suffering from retention of urine. Before his admission numerous unsuccessful attempts had been made to empty the bladder by means of a catheter. On admission the patient complained of much pain in the hypogastric region, which was the seat of a smooth, rounded swelling, reaching almost to the umbilicus. He stated that he had gonorrhœa some years previously, which had been prolonged into a troublesome stricture, which had been perfectly relieved by the passage of bougies. For more than a year previous to his admission he had suffered at regular intervals from difficulty in urination. The urine had never been bloody, but its passage had often been attended by great pain. It was found impossible, on account of numerous false passages, to introduce a catheter into the bladder. On introducing a finger into the rectum the prostate was felt smooth, rounded, and immensely enlarged. The patient was put to bed, ordered a suppository of belladonna and opium, and to have a warm poultice applied to the abdomen, this treatment relieving him almost immediately, and urination became freer. For a few days he did well, but the difficulty in urination soon began to increase, and by the fifth day after his admission the symptoms had become so urgent that it was deemed advisable to repeat the attempt to pass a catheter. This attempt was as futile as the first. Then aspiration of the bladder through the abdominal walls was attempted, but only a small quantity of blood was obtained.

In introducing the canula it gave the sensation of passing into a solid body, and careful palpation revealed the fact that there really was a solid body apparently occupying the whole bladder. It was now decided to open the urethra at the base of the bladder through the perineum, and the operation known as Cock's was selected. The operation was followed by the escape of a small amount of urine. After this, the patient did well, with the exception of an attack of dysentery, until the ninth day after the operation, when peritonitis suddenly developed. He died on the following day.

Autopsy (two hours after death).—Upon opening the abdomen, a thick yellowish-red purulent liquid, having a urinous odor, was found bathing the intestines, the walls of which were everywhere bound together by recent adhesions. The omentum was in places firmly adherent to the intestines, and contained numerous irregular nodular masses, varying in size from that of a pea to that of a hen's egg. These masses on section presented a violet-yellow color. In the lower part of the abdominal cavity was a large irregularly-shaped mass, firmly adherent to the small intestines, colon, omentum, and walls of the pelvis. On careful dissection a tumor was found to originate in the prostate gland. On section it presented in parts the characteristics of scirrhus, in others those of encephaloid; in other places there were loculi, with reddened irregular friable walls filled with a fluid similar to that found in the abdominal cavity, though no connection between these loculi and the abdominal cavity could be found. No trace of normal prostate gland nor seminal vesicles could be discovered. The bladder, containing a few ounces of urine, was found in front of the upper portion of the growth, its upper boundary almost on a line with the umbilicus. Its anterior wall was apparently perfectly normal; its posterior wall, resting on the tumor, was thickened, raised, red, and velvety. The ureters were normal and opened in the usual position. The urethra, as far as could be seen, ran along the anterior surface of the tumor, and was not involved by it. The weight of the growth was five pounds two ounces. The kidneys, stomach, lungs, and intestines were normal. The peritoneum and capsules of the liver and spleen contained several secondary growths. The brain was not examined. Microscopic examination showed the growth to be a typical small round-celled sarcoma. The secondary deposits were similar in structure to the primary growth. The submucous and muscular tissues of the bladder walls were somewhat infiltrated. The growths in the capsules of the liver and spleen had commenced to penetrate those organs.

MELANOTIC SARCOMA OF ORBIT, WITH METASTASIS TO LIVER, ETC.

Presented by DR. SHAKESPEARE.

The patient was an elderly woman who had been operated upon by Dr. Heyl at the Episcopal Hospital some six months before death; the whole contents of the orbit having been then thoroughly removed. Recurrence took place, the cavity being filled with a black fungating mass; the left nostril gave vent to a blackish discharge, and the various internal organs became involved, notably the liver. Death took place from exhaustion. Most of the metastases were entirely melanotic, but some in the liver showed at their periphery a distinct whitish zone. Dr. Shakespeare remarked upon the singular fact that orbital growths were usually melanotic, although they might not spring from the choroid coat of the eye as in this case, where all pigmented structures had been removed months ago.

CORRESPONDENCE.

THE NON-IDENTITY OF CROUP AND DIPHTHERIA.

To the Editor of THE MEDICAL NEWS.

SIR: In reply to Dr. MacGillvary's letter in your issue of November 11, I can only repeat with Locke, "Let us define our terms." The whole dispute concerning diphtheria and croup arises from looseness and ambiguity of expression. The word "croup" is used very vaguely by the lay public, and even by a majority of the medical profession. Three distinct diseases are in

fact covered by the term in its popular meaning, viz., (a) catarrhal laryngitis, (b) laryngismus stridulus, and (c) membranous inflammation of the larynx, which is, in my opinion, identical with diphtheria. Dr. MacGillvary appears to rest his view of the duality of the diseased condition on the presence of an infective property in diphtheria which he supposes to be wanting in croup. If false membrane is confined to the small area of a child's larynx, there is undoubtedly less chance of the disease being transmitted than when the much larger surface of the pharynx is covered with the *matrices morbi*. It is, however, extremely rare to meet with a case in which the larynx alone is the seat of the disease. When, on a recent occasion, circulars relating to this question were addressed by the Medico-Chirurgical Society of London to members of the profession throughout this country during the many months the committee was sitting, not a single patient could be discovered who was suffering from false membrane limited to the larynx. To this I may add that during my own experience, which extends over five and twenty years, I have never met with such an instance, and I believe that when practitioners have imagined that they had to deal with membranous laryngitis the cases have in reality been examples of acute catarrh without exudation. The tendency to spasmodic affections in children, so familiar to every practical physician, is shown in the larynx, even where there is no congestion of its lining membrane. If inflammation occurs, spasm is almost certain to supervene, and this symptom is brought into great prominence, owing to the extreme narrowness of the glottis in young subjects, even in its natural condition.

It is obvious, therefore, that mistakes in diagnosis, involving the very essence of the affection, may easily be made.

Your obedient servant,

MORELL MACKENZIE.

HARLEY ST., LONDON, NOV. 30.

THE NEW YORK CODE.

To the Editor of THE MEDICAL NEWS.

SIR: In your brief comments upon my note to the *Louisville Medical News*, touching the existing New York Code of Medical Ethics, you quote from the editorial comments of that journal as follows: "We imagine the thoughtful reader will find no little difficulty in following Dr. Agnew through the premises which seem to have led him to the conclusion that to protect the public from quackery the medical profession should take the quacks into fellowship and thus publicly recognize them as physicians worthy of confidence and affiliation." It will take the intended sting out of the comment if I simply say that I have nowhere said anything that might fairly, even with the exercise of the imagination referred to, be construed into any such proposition. The existing Code in my State contains the following clauses: "Members of the Medical Society of the State of New York and of the medical societies in affiliation therewith, may meet in consultation legally qualified practitioners. Emergencies may occur in which all restrictions should, in the judgment of the practitioner, yield to the demands of humanity." Now, you will observe, that the first clause is permissive, not mandatory, and any member of the State society, or of affiliated societies, may avail himself of the liberty accorded or not, as he chooses, and its operation is confined to *legally* qualified doctors. The second, or emergency clause, as it has been called, simply authorizes a practitioner to answer any call, regardless of whom he may come in contact with, regardless for the moment of the character, even, of that person, and bent only on doing a humane act. It is, of course, inferred that a member of a learned profes-

sion is sufficiently familiar with English to know the meaning of the word "emergencies." Nowhere is it proposed to take quacks into "fellowship." Fellowship means "companionship," "association," "confederacy," "communion," "intimate familiarity."

A legally qualified practitioner may, it is true, be a quack, if we adhere in strictness of definition to the accepted etymology of that word, but not one in the eyes of the law. A quack by nature is a "boaster," a "bouncer," a "noisy, ostentatious talker," as when a man parades his virtue and decries that of other men; a pretender to medical skill, "quacking, duck-like, about his cures," "an ignorant practitioner," an "empiric."

In the State of New York the statutes are such that if any man should apply the opprobrious term of "quack" to a man possessed of a diploma duly obtained from an authorized college, he might be made to smart in exemplary damages for it, even though the person so characterized were a "homeopathist" or an "eclectic."

The writer in the Louisville journal goes on to say that "the great principles of ethics and morals are immutable, and are altered neither by longitude nor latitude," etc. I suppose that we may take it for granted that no one will deny the idea of the principle of abstract right and wrong, which the writer probably intends to assert. The only real test, after all, in morals, is "What saith the Lord?" and we cannot get away from the correlative fact that "Where the spirit of the Lord is, there is liberty." I would like to know what violation of *good morals* there would be in my meeting in consultation, for a beneficent purpose, in the State of New York, a man pronounced by the authority of the State to be a "*legally qualified practitioner*." We must bring the matter down to some such simple test. I am not compelled to meet any one in consultation. I may, for reasons personal to myself, refuse to meet the very embodiment of all the native qualities of Hippocrates, but I will, at my peril, refuse to meet a "*legally qualified practitioner*," if I couple with my declination, the assertion that he is a quack. Such a person suing me for libel in the courts of the State of New York would easily get exemplary damages; indeed, such decisions have been made, and I am glad of it, as it marks a step of progress from barbarism and mob law, and in the direction of teaching men to bridle their tongues. Things are said in medical journals, and elsewhere, in apparently safe retreats, which the writers would not dare to utter in the presence of the individuals at whom the acrimonious utterances are directly or indirectly aimed, or in the presence of an officer of the law.

You say also, "Dr. Agnew unfortunately fails to point out how the new Code is going to influence these reforms," etc., etc. I have repeatedly endeavored to show how it may do so, but especially by displacing the old Code, and no one is more conscious than myself of the imperfection of my attempt, or of the general feebleness of my advocacy. Fortunately, however, a good cause has germinal qualities of its own, which cannot often be roasted out of it by the heat of controversy, or blasted by the insufficiency of its adherents and advocates. So long as we attempt to defend the public against quackery by mere prescriptive codes of our own professional making, we are attempting, as it were, to put out a fire with a garden syringe. Every one knows that the old Code had lost its punitive power with the very growth of society, advance of legislation, and practical ethics. In attempting to assert this I laid myself open to the strictures of my *Louisville Medical News* critic. When the State undertook to express, in the form of statutes, as in my State in the statute of 1880, what a legally qualified practitioner was, that

moment all definitions in our old Code as to what a legal doctor was, which conflicted with the statute, became inoperative and cumbersome, if not ridiculous.

It is a great step in the right direction to have the State assume the responsibility of determining who a legally qualified doctor is. Now, what are we to do in the State of New York? Practise under the law, and by experience of its workings learn to make it better. Enforce the law as it is, and have it amended whenever defects are discovered.

This course is being pursued with more or less success now, not only in New York, but in over twenty States and Territories of the United States. Nearly two thousand medical tramps have been driven out of Illinois alone, by the operation of its registry law. The paragraph on page 699 in your issue of the 16th, shows what we are doing in New York.

We intend to make it too hot here for quacks and outlaws, and trust that after Pennsylvania sees how well the law works your journal may advocate the enactment of a similar law, or a better one. We cannot, in our State, have the *imperium in imperio* certain to result if the State Society which derives its life and authority from the State is practically in opposition to the State. Especially is this so when the latter goes as far as public opinion has demanded in fixing the legal qualifications for practising medicine. We must, with the whole body of legally qualified doctors, sustain the State law and cultivate public opinion as rapidly as possible to make the law better and better. We will give great aid, moreover, by pushing on reforms in medical education, and supplying from our medical schools a better type of doctors as instructors of the people. We wish to encourage, in every way, rivalry between the States in perfecting laws against quacks till we reach a point where a quack will become a mere tramp. Results thought by many to be utopian have been accomplished. We need, at the same time, each man for himself to examine his own conscience to see how far he may be, at heart or in acts, more or less a quack. Do we never boast or talk ostentatiously about ourselves and decry our medical neighbors? Do we never in medical journals or elsewhere pretend to have virtue and skill which we do not really possess? Let us remember the fable of Valentine and Orson. Let us hold up in our own lives the "burnished shield" of evidence and conquer our brother by the reflection of his imperfections. If we self-called regulars were ourselves less marred by the blemishes we see in quacks, we perhaps might do more good in leading legislators to embody true reform, and high ideals, in better laws for the public good.

Yours faithfully,

C. R. AGNEW.

New York, December 17, 1882.

OBITUARY.

JOHN FORSYTH MEIGS, M.D.

Dr. MEIGS died in this city on Saturday, December 16th. By his death Philadelphia has lost one of her most eminent physicians and upright men. It is a great loss. Even in so large a community as this no one is so high or so pure as not to have been strengthened and encouraged by the example of such a life as his.

Dr. Meigs was a son of the late eminent professor of obstetrics, Dr. Charles D. Meigs, who gladly took advantage of the disposition to study medicine which this one alone of all his sons exhibited. Perhaps, afraid that he might, as he grew older, find stronger attractions in a different field, his father placed him as a mere boy in the medical department of the University of Pennsylvania. The writer of these lines well re-

members his more than boyish appearance on the benches of the lecture-room, and his grave and absorbed expression while listening to the eminent teachers who filled the chairs of the school from 1834 to 1838, the year of his graduation, when he was but twenty years of age. It always appeared to the writer a serious error, the commission of which, by a man of such varied learning and elegant tastes as the elder Meigs, was difficult of explanation. A powerful motive must have determined him to urge his young son to enter upon the most difficult, because the most exhaustive, of professional studies, without either the maturity of mind, or the liberal education which fitted him for the investigation of medical subjects. Possibly, probably even, it was the father's anxiety that the beginning of his son's career should be guided and supported by himself, which caused him to burden so immature a youth with the grave and difficult matters that abound in medicine.

Fortunately, the son was very unlike the students who surrounded him, and from whom he kept almost entirely aloof, devoting himself with serious assiduity to his medical studies.

In this narrow and perhaps tedious road he betrayed no weariness or impatience, for he had not inherited the impulsive ardor or the sensitive genius of his distinguished father, but delighted, rather, in steadily hewing his way forward through all the obstacles that opposed him.

Immediately after graduating in medicine he was elected a resident physician of the Pennsylvania Hospital, and there the writer, who had been studying abroad, first knew him personally and as a colleague. For a year these two young men occupied the same room in the hospital, and formed a friendship that never failed until it was broken by death. The frank, simple, and steadfast character of young Meigs inspired his companion with affection for him; and his zeal in gaining knowledge, and his devotion to his duties, were then as conspicuous as they continued to be throughout his professional career of more than forty years. On quitting the hospital, he spent more than a year abroad, paying, indeed, some attention to medicine, but still more to the interesting objects of an European tour.

On his return he at once began the practice of his profession under the eye of his father, who gave more or less into his charge the younger members of the numerous families he attended. He entered zealously into the work, not as a mere practitioner, but also as an observer of disease, recording minutely the history of every case, so that in the course of a few years he accumulated a large mass of material which formed the basis of his lectures and of his work on the "Diseases of Children." This treatise established his reputation in connection with the department of medicine to which it belongs, and was at first, as it still continues to be in its seventh edition, the best work upon the subject in the English language. By degrees his practice, no longer confined to persons of tender age, embraced the older members of the families who had received innumerable proofs of his conscientious and unsparring devotion and his remarkable practical tact and skill, and then expanded beyond this personal limit, until both time and strength failed him to respond to all the demands upon his services, which were also constantly required in consultation.

On several occasions the health of Dr. Meigs suffered under this excessive strain, and obliged him to suspend his active labors. Again and again he was warned against so lavish an expenditure of his powers, but no warning or persuasion availed permanently, or in any great degree, to lessen materially his professional ardor and industry. His work had always been the passion

of his life, and his death by devotion to it became a martyrdom.

The most important public office held by Dr. Meigs was that of attending physician to the Pennsylvania Hospital. He performed its duties for twenty-five years with great devotion and enthusiasm. He perhaps cherished them above all other professional occupations, and took especial pains with his clinical lectures, which were as remarkable for the personality that pervaded them as for the soundness of the practical lessons in which they abounded. A number of them which were published from time to time are distinguished by these characteristics.

In earlier life he was one of a corps of lecturers known as the "Philadelphia Association for Medical Instruction," in which he at first gave several courses of lectures upon the diseases of children, and afterwards upon "Practice of Medicine." These lectures were the original and formal foundation of his published treatise already mentioned. He also produced a number of occasional papers, among which may be mentioned those relating to the "Blood in Malarial Diseases," "Coarctation of the Aorta," "The Use of Cold Water;" a "History of the Pennsylvania Hospital," and a "Life of Dr. Charles D. Meigs." The last of these was prepared for the College of Physicians.

The fatal illness of Dr. Meigs was due to a pleuro-pneumonia, involving originally the left lung, but soon extending to the right also. It terminated his life on the sixth day of his confinement to bed.

The sadness inspired by the death of Dr. Meigs is not mitigated by the knowledge that he has fallen a victim to that peculiarly American habit of life in which a maximum of labor is associated with a minimum of recreation, and whose object is too often attained when the capacity of enjoying it is exhausted. A life more evenly balanced by pleasure and toil would certainly have been a happier one to our lost friend, and probably would not have been so abruptly and prematurely ended.

SIR THOMAS WATSON, BART., M.D.

A cablegram of December 12th, announces the death, in London, of Sir Thomas Watson, Bart., M.D., Physician in Ordinary to the Queen. He had reached so advanced an age, and had so long ceased to appear in print, that those who remember Watson as the author of a text-book on practice with which they were introduced to the subject, may experience a feeling of surprise that he has lived up to the present time. He was born in 1792, and was educated at Cambridge, where he took his B.A. as tenth wrangler in January, 1815. He was 27 years of age when he began the study of medicine at St. Bartholomew's, and became M.D. in 1825. He was first appointed to the Middlesex Hospital, and afterwards to King's, where he delivered the course of lectures which made him famous when published in the *Medical Gazette* in 1844. These lectures, known as "Watson's Practice," became at once immensely popular. Their simplicity and elegance of diction, the scholarship without pedantry, displayed, and the admirable clinical skill which characterized them, were the distinctive features which rendered them a universal favorite. Besides the numerous editions in England, there were a great many reprints in this country. The great excellence of Watson's Practice was not the sole cause of its popularity; it must be remembered that at that time there were few candidates for professional favor in this department of medical knowledge. However, no amount of competition in the same field would have prevented the success of such a work. In 1859 Dr. Watson was appointed extraordinary physician to the Queen; in 1862 he became

D.C.L. of Oxford, and LL.D. of Cambridge. He had now reached the position of the leading consultant in London, and was called on in the fatal illnesses of the Princess Mary, the Duke of Cambridge, and the Prince Consort. Subsequently he became the physician in ordinary to the Queen, and was created a baronet. Until a very recent period he continued in active practice, and for many years was the most trusted medical adviser of the higher classes of English society. In the photograph which accompanies the sketch of Dr. Watson's life, published in the "Photographs of Eminent Medical Men of all Countries," issued by Churchill in 1867, we see a countenance of mingled benignity and firmness. He is seated in his library, surrounded by his books. His neat attire, the associations of a cultured physician, and the thoughtful countenance, make up a most interesting *ensemble*, and reveal, at the same time, the literary character and professional eminence. Such was the position of Watson in London—scholar, gentleman, and physician—a scion of an old family, a wrangler of Cambridge University, and the leading practitioner of the metropolitan city of England.

NEWS ITEMS.

NEW YORK.

(From our Special Correspondent.)

NEPHRECTOMY.—The operation of nephrectomy, so popular of late in New York, has not been resorted to as enthusiastically as it was before the recent removal of the kidney from a patient in one of the city hospitals. No urine was passed after the operation, and the woman died in two days. It was found that there had been but one kidney—that removed by the surgeon.

THE NEUROLOGICAL AND MEDICO-LEGAL SOCIETIES, long noted for internal wars, have lately been figuring in the daily papers. Two rival nominees for the Presidency, Dr. W. A. Hammond and Mr. Claude Bell, have had an exciting contest. Mr. Bell, however, defeated his opponent after a hot fight, and both parties smoothed their ruffled plumage at a handsome supper given at the Brunswick Hotel subsequently by the successful candidate.

CHANGES IN THE POST-GRADUATE MEDICAL SCHOOL are in order: Dr. M. A. Pallen has resigned to go to London, his place to be filled by Dr. B. W. Dawson, formerly editor of the *American Journal of Obstetrics*. Dr. H. G. Piffard has also withdrawn from the faculty.

BROOKLYN.

(From our Special Correspondent.)

ISOLATION OF INFECTIOUS DISEASES.—At the King's County Hospital there has long been a need for accommodations suitable for the treatment of infectious diseases. The supervisors have been very slow to recognize this want, although it has been repeatedly brought to their attention. That they are awaking to its importance, is shown by the following paragraph taken from a recent report of their committee on hospitals:

"While there are evidences of good management at the hospital, some additional facilities are very much needed. Those now at the disposal of the superintendent are so limited that he finds himself unable to classify certain patients who never should be allowed to be near each other. That is to say, diphtheitic patients are now consigned to the same ward in which fever patients are kept for treatment, the same prac-

tice being necessary so far as those suffering from other contagious diseases are concerned. It is scarcely necessary to say that a patient suffering from one infectious disorder is by no means insured of immunity from another, so that to mix these classes of inmates is to subject them to a danger which might easily be avoided at very small cost."

The light spreads slowly, but it spreads.

SANITARY CONDITION OF SCHOOL BUILDINGS.—There has been a systematic survey made of the sanitary condition of all the private schools of the city, especially in respect of their drainage and plumbing. In not a few instances, serious defects have been found by the inspectors, and the health of the pupils has been thereby impaired.

THE NEW HOSPITAL BUILDING OF THE ST. MARY'S HOSPITAL was formally opened Sunday, December 17, and was attended by hundreds. Visitors coursed through the finished wing from 11 o'clock till 5. At 3 o'clock, those who gained access to the hall were addressed by Bishop Loughlin and Mayor Low. The hospital is admirably arranged and will be under the charge of the Sisters of Charity. Dr. John Byrne has borne the brunt of the labor of progressing this institution, giving it thought, time, and money. He has associated with him a large medical staff, divided into specialties, not simply those peculiar to a hospital for women and children such as was the old basis of St. Mary's, but also those that frequently have their own separate institutions, such as the specialties of the eye and ear, the skin, the nervous system, and the joints. It is claimed that this is a new departure, never before developed in this or any other country.

BOSTON.

(From our Special Correspondent.)

DR. CARPENTER ON HUMAN AUTOMATISM.—In opening his *third lecture* upon human automatism, Dr. Carpenter said that the subject of the evening (the automatism of habit) was one upon which metaphysics unaided by physiology have been unable to cast any light. For example: Stewart, a metaphysician of great merit, thought the act of walking to be always voluntary. Other metaphysicians considered it needful to suppose an infinitesimal amount of volition, which practically is no volition at all, and thus corresponds to the theory of physiologists. As already shown, the ordinary movements of the lower animals originate in a mechanism native to the animal itself. A further proof of this fact is found in the movements of a frog whose cerebrum has been removed. Effect this by decapitation, and the frog will still assume its ordinary position of repose. Prick its foot, and it will jump; apply acid, and the foot will be raised in an attempt to wipe it; cut off this foot, and the other will begin to act. More remarkable is the result when the cerebrum has been removed without disturbing the ganglionic tract, a continuation of the axial line, corresponding to the anterior portion of the nerve-cord of a centipede, and which in the human body the lecturer has always considered the primary recipient of impressions made upon the senses—sight, hearing, etc.

The frog, when thus mutilated, will originate no movement unless touched or otherwise disturbed. When touched, however, it will jump, and will so direct its spring as to avoid an obstacle, which, (the optic ganglion being intact) evidently is seen not precisely by the frog, which is unconscious, but by the ganglion which consequently directs the motor functions of the connected ganglia. Under like conditions, the frog, if stroked will croak in a peculiar manner and, placed

upon the hand, the latter being gently inclined, will climb to a position of security. These movements all find a parallel in the actions of human beings when the cerebrum is either quite passive, as in sleep or coma, or else is being used in other directions, the chief difference being that while in the frog all motions necessary to life are provided for by innate mechanism, in us the mechanism for many motions has to be shaped by the original operation of the will.

Dr. Carpenter expressed the belief that the axial cord with its sensory and motor nerves is *wholly distinct from the cerebrum*, and that the latter receives information of what the cord is doing through the ganglionic line already mentioned, and gives its orders through the same medium. Strong corroboration of this theory lies in the fact that paralysis follows a lesion, not of the cerebrum, but of this ganglionic tract. Distinct pathological proof of independent action of portions of the axial cord has been supplied by cases of accidental division of it. Dr. William Burke, of Bristol, records the case of a man whose axial cord was divided by an injury to the spine in the small of the back above the ganglionic centres which control movements of the legs. The man was entirely unable voluntarily to move his legs and quite unconscious of anything that was done to them, yet if the soles were tickled or a hot plate applied, the legs moved at once without the man's knowledge. The testimony of military men who have seen nearly entire regiments walking when sound asleep, and numerous instances of men riding on horseback in the same state, prove that when once established, these acts require no further direction from the will. Yet, the operation of walking calls into action nearly every muscle in the body and requires a process of balancing so complex that hitherto it has been impossible to construct a walking automaton. The explanation of these automatic movements is that the will has so directed nutrition to certain portions of the nervous system that these have shaped themselves into automata capable of performing their several motions whenever they are so excited by the will.

Cases of perfect insensibility, or coma, resulting from apoplexy have often occurred with similar effects. A London policeman in this condition continually caressed and adjusted his moustache, of which in his conscious state he was very proud, and which he was in the habit of manipulating in this manner. A rope-maker in a state of coma, began to twist a cord whenever it was placed between his fingers. Sundry other examples were given. In India the punkah pullers continue their work when asleep as perfectly as when awake. But in their case heredity has entered the problem, through the system of caste, the same families having followed the occupation for centuries.

A good instance of this creation of organic mechanism by direction of the will is the process of speech. Articulation, as well as the production of musical tones, is guided by the sense of hearing. Deaf mutes never learn to articulate by themselves, and when taught they learn by attention to the muscular sense of the motions of the vocal organs. In a case of total deafness the result of an accident at nine years of age (Dr. Kitto), the use of the vocal organs became disagreeable, and they were abandoned until friends urged assumption of their use.

Dr. K. explained that he gave up speech because he was obliged to guide the vocal organs by the unaccustomed process of attention to the muscular sense, which wearied him just as it fatigues one to roll the eyes in a perfectly dark room, where the movement requires attention to the muscular sense, instead of being automatically guided by ganglia under the influence of light. In training a deaf mute, the first step is to place his finger on the teacher's larynx, so that he

may feel the vibration caused by formation of tone. His finger is then placed on his own larynx, and he is encouraged to create a similar vibration. This reproduction, by repetition, becomes the basis of automatism of vocalization, and the process is a model for the formation of all secondary automatic motions. We train our automata in the acts of writing, drawing, in instrumental music, etc., and when automatism is once established the cerebrum says to the spinal cord: "Do this," and the cord does it for us—not by us. Thus a pianist will play difficult music when the mind is engrossed by something else. A lady in Dublin once played dance music an entire evening while asleep, it being necessary only to awaken her sufficiently from time to time to make her understand what movement, waltz, quadrille, etc., was wanted; telegraph clerks sometimes despatch messages while asleep, or thinking of other matters. One testifies that he can read the message and put it into the movements necessary to the machine while asleep, with less liability to error than if he gave his attention to the process. Morbid phenomena confirm the theory.

In tetanus the ganglionic tract in the head is not much affected, fixation of the respiratory muscles being the chief cause of death; but in hydrophobia, an allied disease, convulsions are caused by the sound or sight of water, by a picture of it, stranger still by suggestion of it, thus corroborating the former statement that equal effects are produced by exciting the ends of nerves and by impulses from the brain. Yawning is another illustration; ordinarily it is owing to the accumulation of carbonic acid in the lungs, the result of practically suspended respiration due to fixation of the attention. The carbonic acid irritates the terminal ends of the nerves, and the reflex action of gaping follows. The sight of yawning in others will also induce a yawn, in this instance the result of brain impulse. The necessary condition in all these instances is that the nerve centres must be predisposed to a particular act, which may then be caused either by a stimulation of the nerves or by an impulse from the cerebrum.

CANADA.

(From our Special Correspondent.)

TRouble in the Mixed Medical Class at KINGSTON.—Trouble has arisen at the Kingston Medical School between the male and female students. The latter took offence at a remark made by the Professor of Physiology, and left the lecture-room. The male students petitioned the faculty to dismiss the ladies, and threatened to leave in a body if their request was not complied with. The faculty refused to be dictated to, and it was subsequently arranged that the females now attending will be allowed to finish their course, but no more of the sex will be admitted to the college.

NOMINATIONS.—The President sent the following nominations to the Senate last Friday: Colonel Robert Murray, surgeon, to be colonel and assistant surgeon-general; Lieutenant-colonel John F. Hammond, surgeon, to be colonel and surgeon; Major Basil Norris, surgeon, to be lieutenant-colonel and surgeon; Captain Frank Macham and Daniel G. Caldwell, assistant surgeons, to be majors and surgeons.

A CASE OF LEPROSY IN MASSACHUSETTS.—A case believed to be genuine leprosy has developed in the almshouse at Salem. The patient is Charles Derby, who arrived there from San Francisco a week ago. The disease is pronounced leprosy by a sea captain and a physician who was familiar with that disorder in Africa. A consultation of six leading physicians has been held, but they arrived at no decision, and Dr. Walcott, of the State Board of Health, passed his judgment on Decem-

ber 18, that the case was unquestionably leprosy, and that the disease was contracted in the Sandwich Islands. Derby is well educated, and was for some years at Honolulu as chief botanist to Queen Emma. He has been isolated and his clothing burned.

A LEGALIZED EDUCATIONAL FRAUD.—Charles J. Eastman, Rufus K. Noyes, and W. D. Corken, corporators and officers of the Bellevue Medical College, recently arrested on the charge of issuing bogus diplomas, were examined before Commissioner Hallett on December 15, at Boston, on charges of using the mails for fraudulent purposes. Evidence was offered by the Government, and was not contradicted, to the effect that the college had issued degrees and diplomas to individuals grossly ignorant of the theory and practice of medicine, and after a farcical course of instruction covering a few weeks or less. Defendants claimed simply that they were empowered to do all that was alleged, by the laws of Massachusetts. It appeared that the institution was legally incorporated, and that, according to the corporation laws and its charter, it enjoys all the privileges of other medical colleges. These facts were admitted by the Government attorney. Commissioner Hallett said if the Faculty chose to issue degrees to incompetent persons, the laws of Massachusetts do not prevent them. The prisoners were therefore discharged.

PROF. VIRCHOW'S HEALTH.—PROF. VIRCHOW'S health is slowly but steadily improving; he is now driven every day in a closed carriage to the Pathological Institute, but avoids all work which requires him to be out of doors.

A DIRECTORY FOR NURSES IN SAN FRANCISCO.—A directory of nurses will be opened in San Francisco, under the direction of Dr. A. S. Whitwell.

IMMIGRANT INTRODUCTION OF SMALLPOX INTO THE UNITED STATES.—Dr. John H. Rauch, Secretary Illinois State Board of Health, states that in reviewing the experience of the past six months' operations of the Immigrant Inspection Service, in connection with the history of smallpox in Chicago for thirty-two years, and the testimony of leading health officials concerning the origin and spread of the epidemic of 1880-82 in the United States, the truth of the following propositions seems to him to be demonstrated:

1. The immigrant is a prime factor in the origin and continuance of smallpox in the United States—on the one hand, even if protected himself, often being the bearer of the contagion in clothing and other effects; and on the other, if unprotected, frequently becoming a victim to the disease and propagating it to others.

2. Local effort and expenditure, either by State or municipalities, are inadequate to the control of smallpox in any given community or commonwealth, so long as the contagion and the material for the propagation of the contagion continue to be replenished by repeated accessions of unprotected or imperfectly protected immigrants.

3. A continuous sanitary surveillance of immigrant travel, from the port of arrival to the point of ultimate destination—such surveillance to consist of repeated inspections, vaccination of all unprotected, systematic observation of suspicious sickness, prompt removal and isolation of discovered smallpox or other contagious cases, disinfection of baggage, clothing, cars, etc.—is essential to supplement whatever preventive measures can be secured before embarkation, during the voyage, or at the port of arrival.

HEALTH IN MICHIGAN.—Reports to the State Board of Health for the week ending December 9, 1882, indi-

cate that intermittent fever, influenza, tonsillitis, and pneumonia, have increased; that neuralgia, diphtheria, and typhoid fever, have considerably decreased, and that typho-malarial fever, bronchitis, cholera morbus, diarrhoea, and whooping-cough, have decreased in area of prevalence.

Including reports by regular observers and by others, diphtheria and scarlet fever were reported present during the week ending December 9th and since, at 16 places, and measles at four places, smallpox was not reported at any place in Michigan.

OBITUARY RECORD.—Died at Brooklyn, New York, December 12th, DANIEL ALBERT DODGE, M.D., in the 54th year of his age. Dr. Dodge was an eminent and skilful surgeon, a most genial gentleman and well beloved by his collaborators. He was for more than twenty years a member of the surgical staff of the Long Island College Hospital, of which institution he was a visiting surgeon at the time of his demise. He was an untiring and faithful practitioner, notwithstanding his health was frail for many years. He was the subject of chronic valvular disease, supervening in a fatal attack lasting over a month, of cerebral embolism. He was an alumnus of the College of Physicians and Surgeons, New York, of the class of 1852.

NOTES AND QUERIES.

THE NEW YORK CODE.

To the Editor of THE MEDICAL NEWS.

Sir: I fear that some of the readers of your journal will get the impression that the last meeting of the Medical Society of the State of New York was made up of delegates and members who were coached to sustain the report of the committee on a new code. This is the opinion I would form from reading your editorial in the last number of THE NEWS were I not better informed. So far from there being any attempt to "fix" the meeting, I know, as one well acquainted with each member of the committee, and with the Society, that there was no effort of any kind whatever to secure a vote in favor of the new Code, save that made in debate on the floor of the meeting. A resolution abolishing the old Code was introduced by myself without previous consultation with but one member of our Society, and it was passed by a majority of two, as a legitimate result of free debate. Besides all this, the last meeting of the Society, in spite of all statements to the contrary, was well attended from all parts of the State. Whatever the faults and shortcomings of opponents of the Code of Ethics of the American Medical Association may be, they have not yet attempted to stifle discussion or to "fix" delegates.

I am, sir, yours very respectfully,
D. ST. JOHN ROOSA.

NEW YORK, December 16, 1882.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT, U. S. ARMY, FROM DECEMBER 11 TO DECEMBER 18, 1882.

BANISTER, J. M., Assistant Surgeon.—To proceed to camp on White River, Colorado, and report to the commanding officer.—*Par. 7, S. O. 250, Department of Missouri, December 11, 1882.*

HALL, W. R., Assistant Surgeon.—Granted leave of absence for one month.—*Par. 8, S. O. 250, Department of the Missouri, December 11, 1882.*

PORTER, J. V., Captain and Assistant Surgeon.—To proceed to St. Francis' Barracks, St. Augustine, Fla., and to report to the commanding officer of that post for temporary duty.—*Par. 2, S. O. 119 Department of the South, December 11, 1882.*

WYETH, M. C., First Lieutenant and Assistant Surgeon.—Granted one month's leave of absence.—*Par. 4, S. O. 206, Department of Dakota, December 18, 1882.*

THE MEDICAL NEWS will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.

Local papers containing reports or news items should be marked. Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS should be addressed to No. 1004 Walnut Street, Philadelphia.